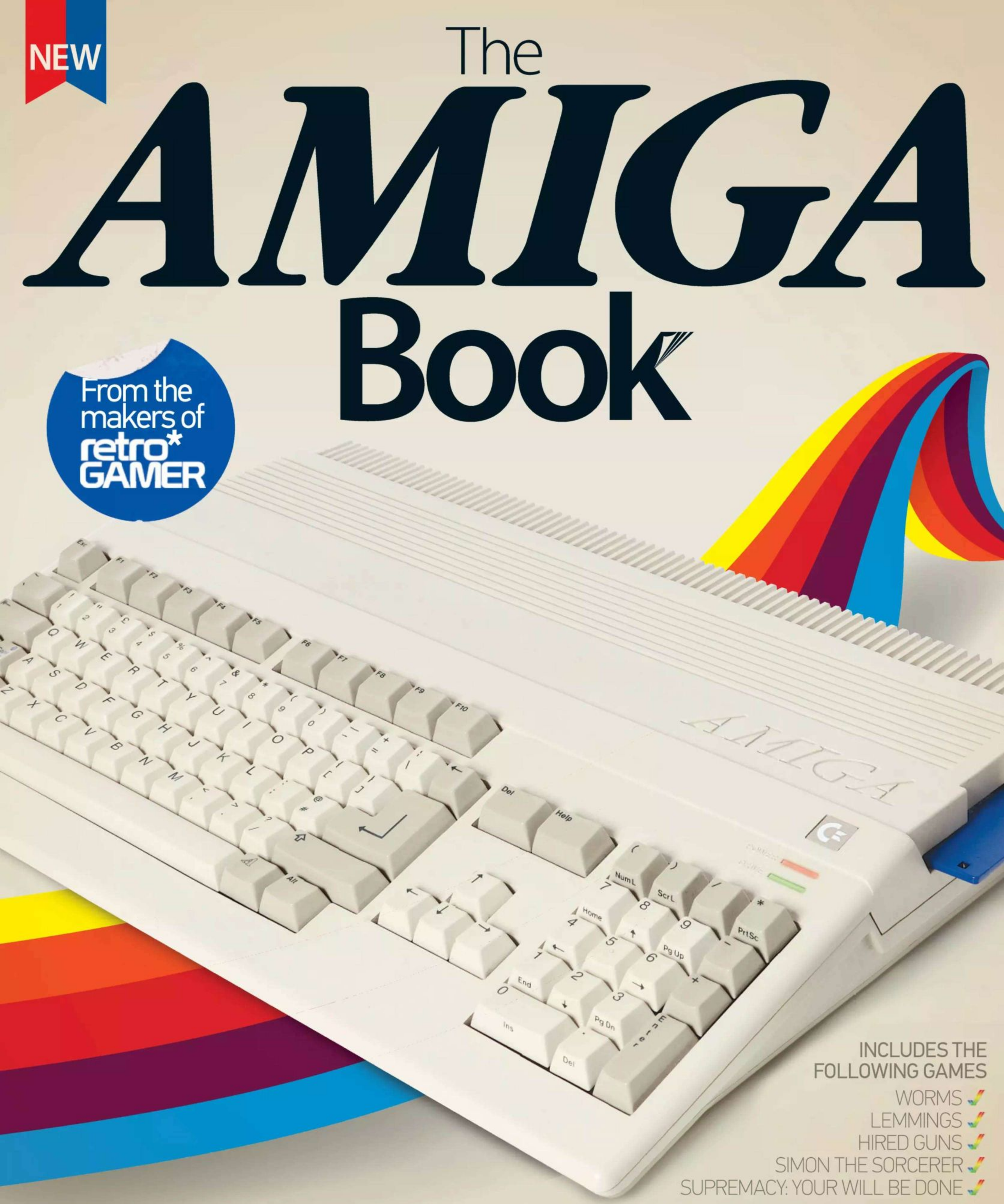
NEW

The AMIGA Book

From the makers of retro GAMER



INCLUDES THE FOLLOWING GAMES

- WORMS
- LEMMINGS
- HIRED GUNS
- SIMON THE SORCERER
- SUPREMACY: YOUR WILL BE DONE

THE ULTIMATE COLLECTOR'S GUIDE TO THE AMIGA

Welcome to

The AMIGA Book™

It's easy to take Commodore's Amiga for granted, but it had a massive impact on the games industry and was an exciting successor to the Commodore 64. Many classic British developers, including DMA Design, Sensible Software, The Bitmap Brothers and Team 17 found success on the 16-bit home computer, while popular franchises like *Lemmings*, *Speedball*, *Worms* and *Syndicate* are still going strong today.

Commodore's computer not only had a thriving demo scene, but its superior graphical capabilities allowed a new generation of artists to get to grips with the machine. It helped usher in a shining new era for videogames, and was more than able to hold its own against the increasingly popular consoles that were beginning to appear.

To celebrate Commodore's groundbreaking machine, we've personally trawled through the **Retro Gamer** archives to deliver some of the finest articles to ever feature in the magazine and updated many of the articles with brand new screenshots and up-to-date editorial. This revised edition also includes more recent articles, covering the making of *Walker*, an ultimate guide to *Lemmings*, the making of *Hired Guns* and more.

In short, if you ever loved Commodore's computer you need to own this book.

In association with retro GAMER magazine

The AMIGA Book

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The Amiga Book

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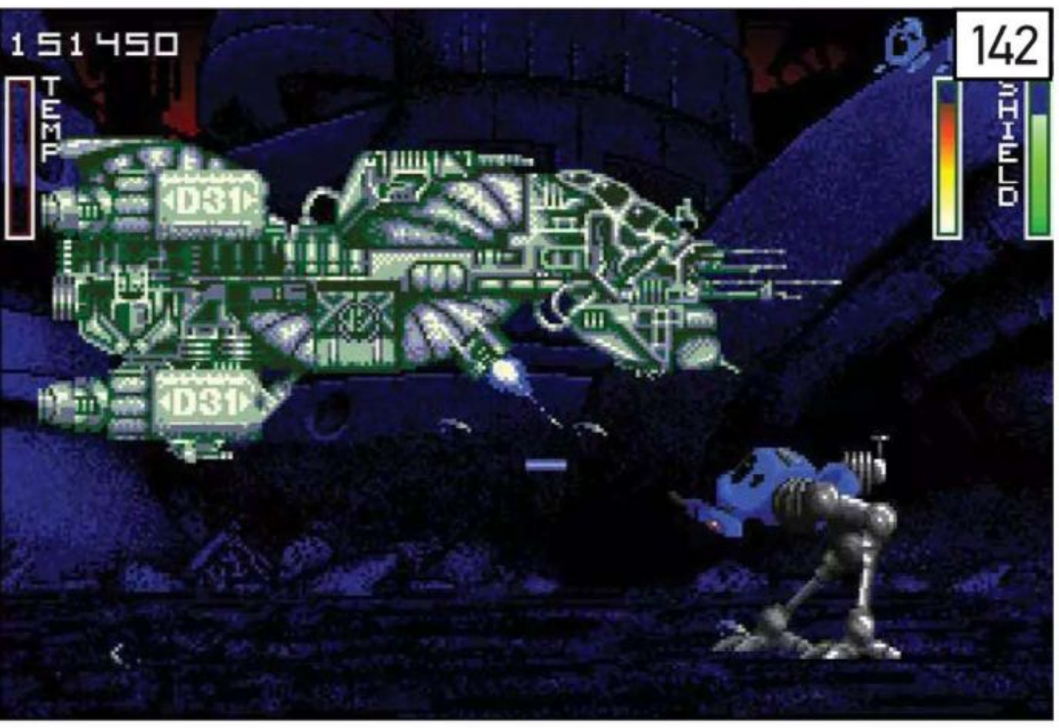

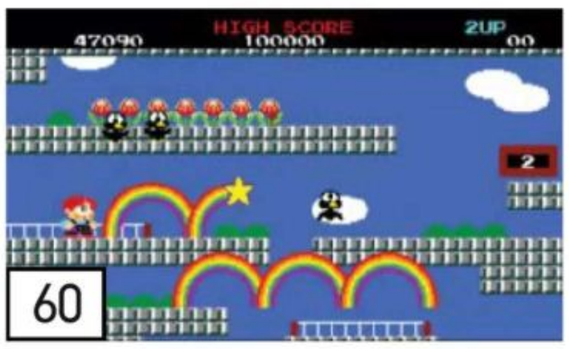

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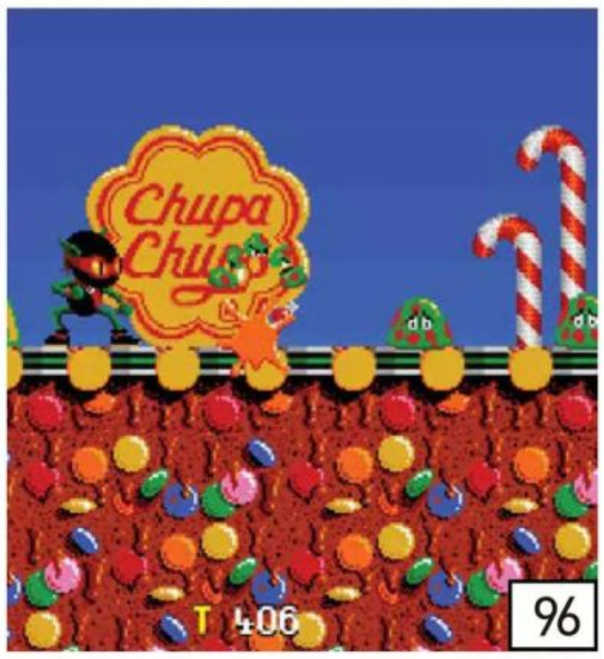

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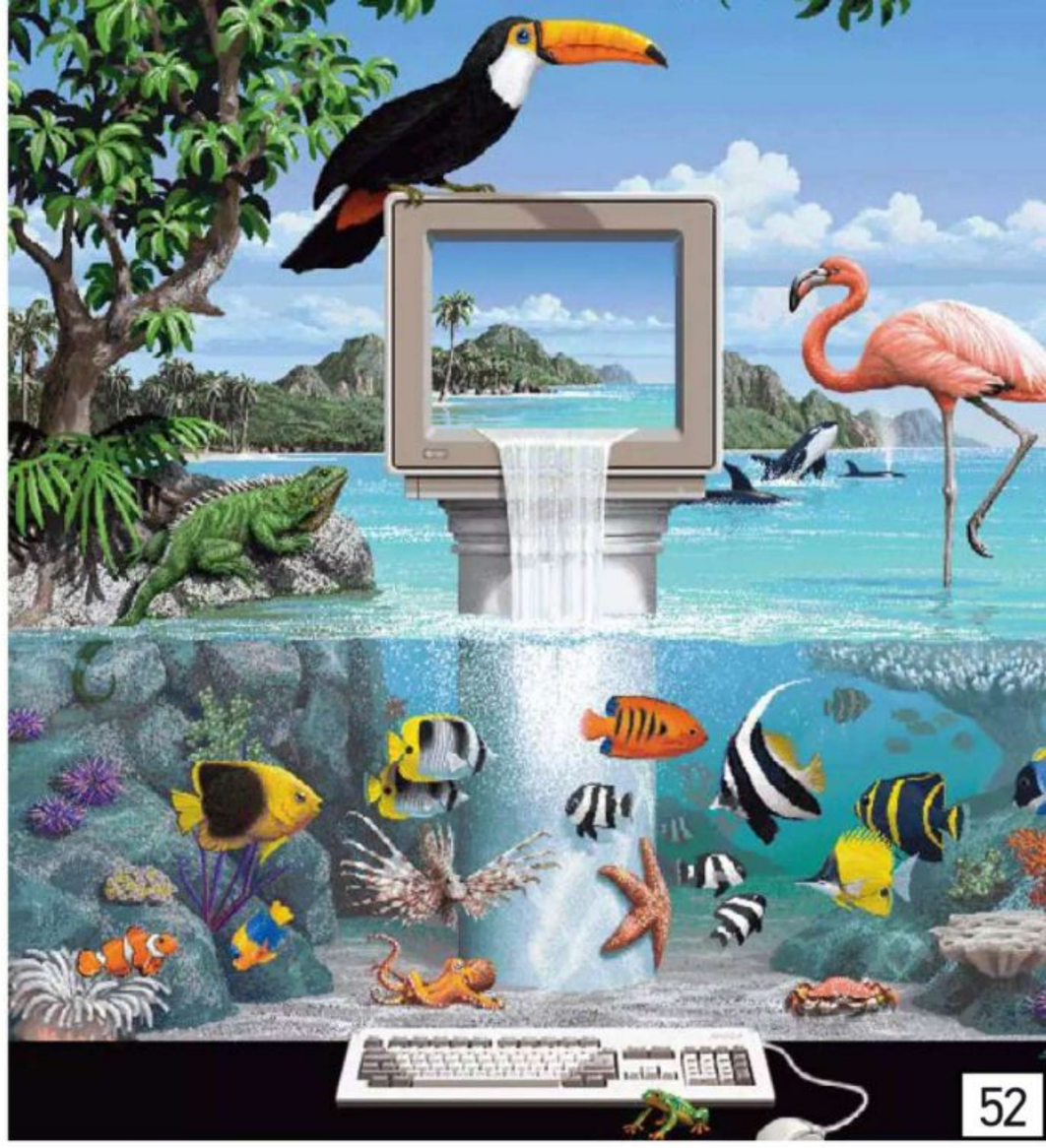

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Want an Amiga? Get these games and peripherals first

Year released: 1987

Original price: £599

Buy it now for: £20+

Associated magazines: Amiga World, Amiga Format, CU Amiga, Amiga Power, Amiga Action, Amiga Computing, Amiga Force, Amiga Mania, The One

Why the Amiga 500 was great… Why *wasn't* the Amiga great? During its early years, the A500 was the most desirable games machine on the planet thanks to several games that just wouldn't have been possible anywhere other than the arcades. As the years passed, its graphics became less relevant but the ease of development meant that there were hundreds of programmers pumping out classic after classic on a seemingly weekly basis.

AMIGA 500

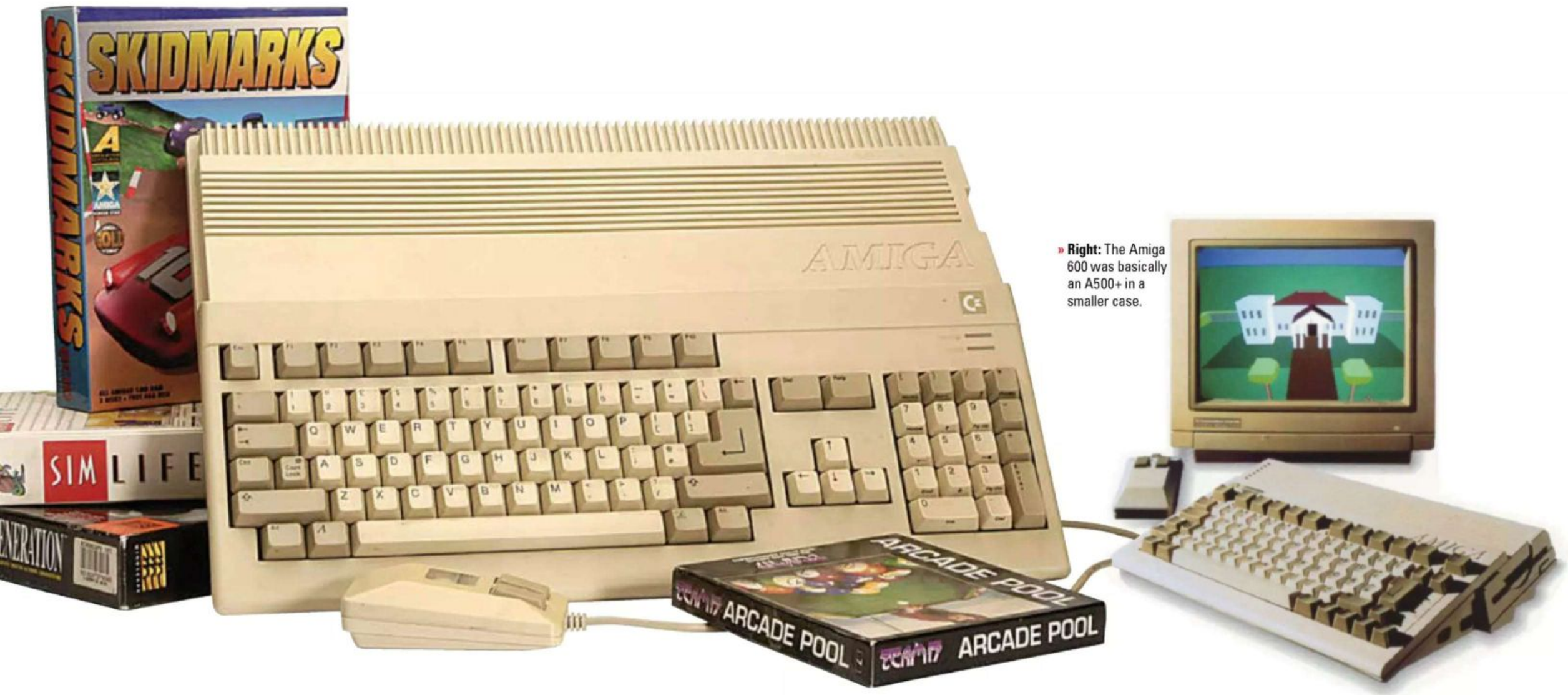
FEW WORDS GET THE NOSTALGIA GLANDS FLOWING LIKE 'AMIGA' AND '500'. TO HEAR IT IS TO BE TRANSPORTED BACK TO A TIME WHEN NEW 2D VISUALS STILL HAD THE ABILITY TO SHOCK AND WHEN UK DEVELOPERS PRODUCED THE BEST COMPUTER GAMES IN THE ENTIRE WORLD. BUT HOW DID THE MUCH-LOVED HOME COMPUTER COME TO BE? ASHLEY DAY REVEALS ALL...

For a home computer that's so inextricably associated with the history and fate of Commodore, it's perhaps a little surprising that the Amiga's genesis can be tracked all the way back to Commodore's biggest rival: Atari. Jay Miner, a talented designer of integrated circuits had joined Atari during the boom period of the late Seventies and was responsible for designing the display hardware in the Atari 2600. With this achievement alone, Miner's place in the videogame history books would be assured, but it was what he planned to create next that would really elevate him into the halls of fame. While at Atari, Miner had envisioned a new type of games machine that would make use of Motorola's powerful 68000 processor. Atari, which was then under the control of Warner Communications, had little interest in the 68000, however, and was much more interested in continuing to exploit the cheaper 6502 processors found in its 8-bit machines.

Disenchanted with the way Atari had been handled in the post-Bushnell organisation, Miner left the company in 1980 and, for a short time, he worked in the medical industry designing pacemakers. Two years later, however, Miner received a phone call that would rocket him back into the computer industry and change the history of gaming forever. On the end of the line was Larry Kaplan, another ex-Atari employee who had left to found Activision. Kaplan was keen to start a new videogame company and was looking for funding. Miner suggested a handful of dentist friends who were happy to invest in new projects and, before he knew it, he found himself working at a new company called Hi-Toro with Kaplan and a group of highly talented ex-Atari engineers.

In order to keep money rolling in, Hi-Toro was split into two divisions. The first would work on peripherals for games consoles like the 2600 and Colecovision whilst a second much more secretive division would experiment with the 68000 processor to create a killer 16-bit games machine. The computer was codenamed Lorraine (after the wife of Hi-Toro's chief executive) and was designed to be as open a development system as possible so that anyone could make a game if they wanted to: the strategy had worked wonders for the hugely successful C64 so it made sense for Hi-Toro to follow suit. It

"THE COMPUTER WOULD BE MORE EXPENSIVE TO PRODUCE THAN ITS RIVALS"



» **Right:** The Amiga 600 was basically an A500+ in a smaller case.

Links

One of the greatest things about old Amiga software is that it can be acquired for free on the internet, or bought for less than a pound per game at auction. For further information on the Amiga's vast number of releases, **Retro Gamer** recommends www.lemonamiga.com and hol.abime.net – both excellent databases of Amiga games. www.aminet.net should help those looking for shareware games and utilities and is also well worth visiting for its historical importance, as the website has been around since 1992 and was once an essential archive for web-surfing Amiga owners. Finally, fans of Team 17 may like to visit www.dream17.info – the only place where Team 17's Amiga back catalogue can be legally downloaded for free.

was also decided that, to take strain from the processor and ensure arcade-quality graphics, Lorraine would use custom-designed chips rather than off-the-shelf components. This meant that the computer would be more expensive to produce than its nearest rivals but the end results would be far better.

1983 was something of a turning point for Hi-Toro and Lorraine. While the rest of the Western videogaming world recoiled in horror from the disastrous videogames crash, Hi-Toro cunningly rethought its organisation in order to survive the harsh consumer climate. The peripherals division, now made redundant by the failure of the console market, was abolished whilst Lorraine was redesigned to be as much a computer as it was a games machine. A keyboard, mouse and expansion options were fitted as standard whilst new staff were hired to work on a fully fledged operating system called Intuition. It is also around this time that Hi-Toro was renamed as Amiga. The Toro name had already been in use by a Japanese gardening technologies firm so it was thought that a new name was needed to avoid confusion. Amiga, a Spanish word meaning 'female friend', was picked for its non-threatening nature. Finally, in September 1983, Lorraine's three main custom chips (later known as Agnus, Denise and Paula) were completed but were far too big to be used inside a working home computer – each was the size of a large circuit board.

> "THE MACHINE ITSELF DIDN'T LOOK THAT IMPRESSIVE, BUT IT WAS HOW THE COMPUTER LOOKED ON-SCREEN THAT REALLY WOWED THE CES ATTENDEES"

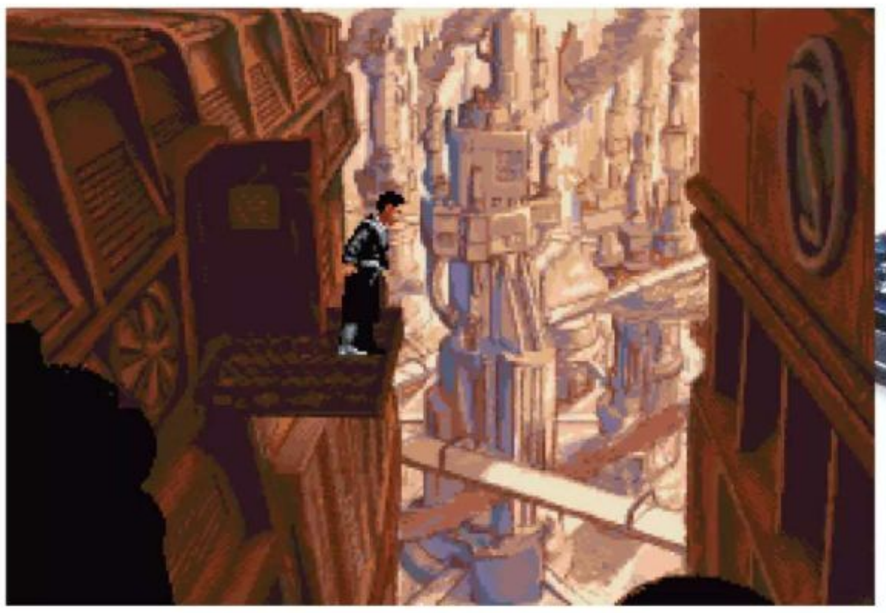
By 1984, Amiga was preparing to show off its top secret project and, on 4 January, Lorraine was finally unveiled at the Consumer Electronics Show in Chicago. The machine itself didn't look that impressive – as it was still in the prototype stage and was made up of several circuit 'breadboards' joined together – but it was how the computer looked on-screen that really wowed the CES attendees. RJ Mical, one of the coders behind Intuition, had programmed the now legendary 'Boing Ball' demo and it was exciting everyone who saw it. Boing Ball was demonstrated at the CES in an attempt to showcase Lorraine's graphical capabilities and did not disappoint. The red and white chequered ball, now an official logo for the Amiga, would bounce around the screen and alternate the direction of its rotations, all while an Intuition window functioned at 100% speed in the background.

The amazing graphical demo was enough to convince one company that Lorraine was worth investing in and, ironically enough, that company was Jay Miner's old employer, Atari. Interested in the custom chips, rather than the computer itself, Atari offered to buy one million shares in Amiga for $3 each and even loaned the firm $500,000 to keep it afloat while the paperwork was finalised. The deal soon began to turn sour, however. Atari knew that Amiga could not afford to pay off its $500,000 loan and so delayed paperwork on the buyout and, in the meantime, reduced its offer to 98 cents per share. Things were looking grim for Amiga. Atari was gearing up to buy the company at a bargain price and didn't even plan to finish the computer that Miner had dreamed of for the past four years. Just before the Atari deal could be finalised, however, Amiga managed to find another enterprising computer company which was both willing to pay a fair price for Lorraine and help develop it into the machine that Miner and company had intended. That company was, of course, Commodore, which swooped in at the last minute to buy Amiga for $4.24 per share and even gave them $1 million to pay off their debt to Atari.

With that sticky situation behind it and rejuvenated by a $17 million investment from its new owner, Amiga set about finishing the Lorraine project, which was now to be known as the Commodore Amiga. The custom chipset was finally finished and

» The original Kickstart came on floppy disk but by the time of the A500 it was a ROM chip on the Amiga motherboard.

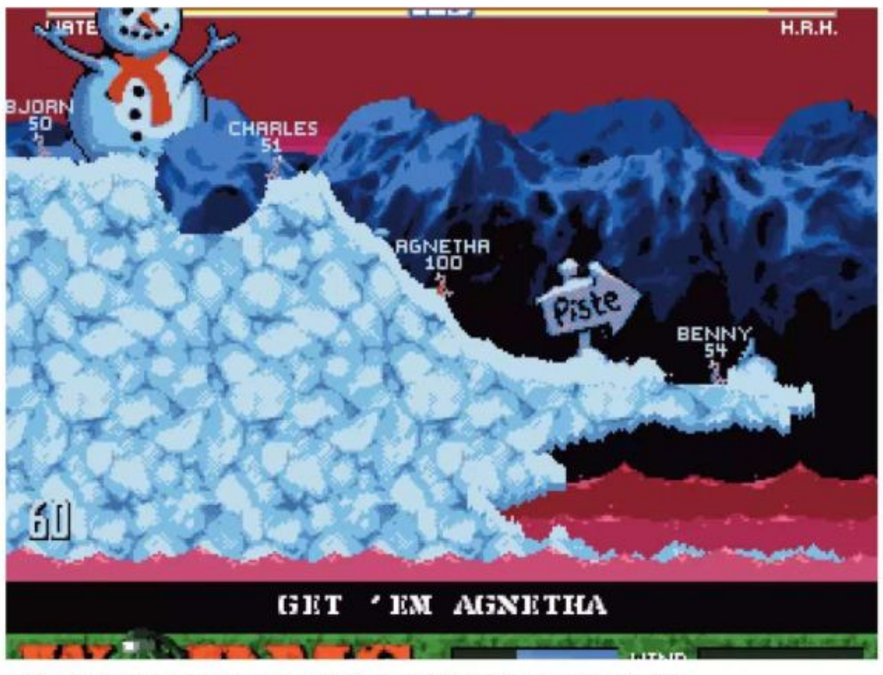
» *Batman: The Movie* did a fantastic job at selling the Amiga to prospective gamers, it was even bundled with the computer for a limited time.



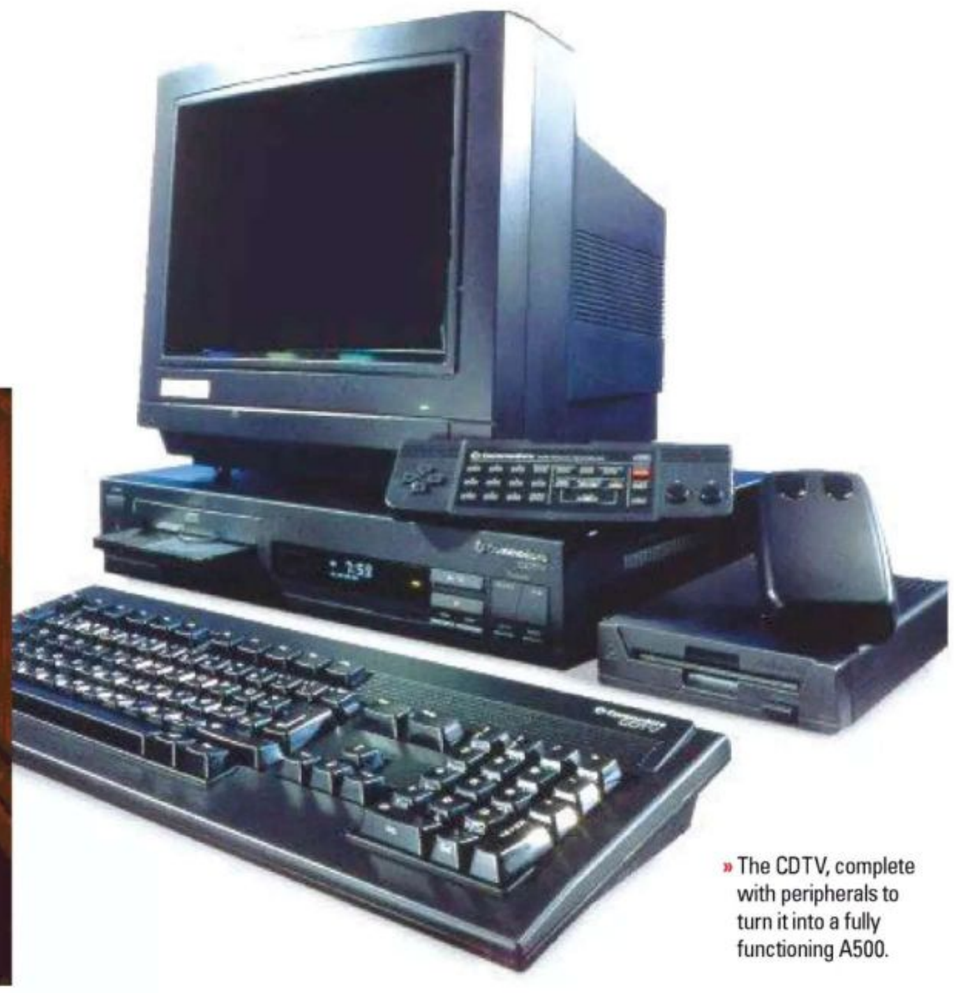
» *Beneath A Steel Sky* was typical of the Amiga's great adventure games.

» The Sales Curve's *SWIV*, the impressive sequel to *Silkworm*.

reduced to a manageable size. Named after different people, so that competitors wouldn't realise what they were talking about in public, each of the chips performed a very specific task. Denise was the graphics co-processor and Paula controlled the sounds and external ports while Gary handled miscellaneous operations. Agnus, meanwhile, was the most important of the chips. Its main function was to regulate access to the on-board RAM but it also included two co-processors, known as Copper and Blitter, which allowed the Amiga to display the astounding graphics for which it became famous. Copper was designed to handle up to eight different sprites anywhere on screen at a single time whilst Blitter was responsible for moving bitmap images around in memory much faster than the CPU would have been able to on its own. On the software side, the Amiga also saw major advancements during its final months of design. Intuition was renamed Amiga DOS (later shortened to Amiga OS) and was separated into two entities. Kickstart took care



» *Worms* was a massive success on the Amiga 500. It's still going strong today.



» The CDTV, complete with peripherals to turn it into a fully functioning A500.

of the Amiga's basic needs, giving it just enough instructions to launch whatever program you fed into the floppy drive. Workbench, meanwhile, was the Amiga's Graphical User Interface. It was the Windows of its day and one of the first to offer a true multitasking environment, years before the PC.

On 23 July 1985, the Amiga 1000 made its first official public appearance at the Lincoln Centre in New York. In typical Commodore fashion, the latest fashionable celebrities, in this case Andy Warhol and Debbie Harry, were roped in to promote the computer. The pair were enlisted to demonstrate the Amiga's graphical capabilities in the program *Graphic Craft*, whilst *Music Craft* was shown off with a full synthesised score, written by the program's authors. The lavish launch ceremony worked and when the Amiga 1000 launched in September 1985 it was an instant hit with those who could afford it. But at $1,295, the A1000 was twice the price of its nearest competitor, the Atari ST, and way out of the price range of the casual user. Those only interested in playing games weren't quite willing to pay up for an A1000 either, as aside from the stunning-looking *Defender Of The Crown* and the Commodore-published *Mind Walker*, the best games on the computer were all ports of existing Atari ST titles. Something would have to change if Commodore wanted the Amiga to dominate the home computer market in the same way as the C64 had.

In 1987 Commodore answered the prayers of those gamers with the launch of the Amiga 500. Essentially a cut-down version of the A1000, the 500 crammed a motherboard, several expansion ports and a disk drive into a slim keyboard casing. It was also compatible with household televisions and featured an upgraded version of Amiga DOS. The loss of a monitor and compact design also meant that the A500 was much cheaper to produce than the Amiga 1000 and could, crucially, be priced low enough to realistically compete with the Atari ST.

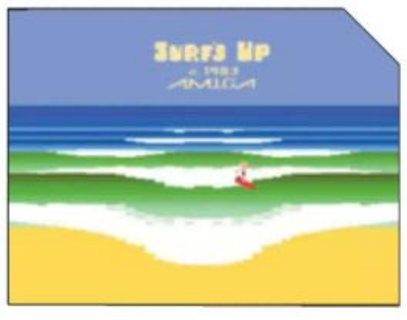
June 1987 saw the UK launch of the A500 at £599, which may seem expensive in an age where people cry and moan at the £425 PlayStation 3 but was actually very reasonable for a computer of the day and saw the 500 become a much more affordable system for computer gamers of the late Eighties. *Defender Of The Crown* made its UK debut alongside the 500 and had the same effect on gamers as it had the year before in the States. The detailed graphics, the number of colours on screen, the incredible musical score and the first-person-perspective jousting were like nothing anyone had ever seen on a computer or console before and as soon as those gamers saw it running they just had to have an Amiga. 1987 was also the year that many European developers began thinking about shifting development from C64 and Spectrum to the Amiga. The affordable A500 and open architecture of the computer made it

» The original Amiga 1000 complete with handy keyboard garage.

» *Desert Strike* was a big success for Electronic Arts, proving to be the thinking man's shoot-'em-up.

Amiga 2600

Although some may know that the Amiga company (aka Hi-Toro) started out developing for the Atari 2600, few have actually played the games, mostly because they were developed for an obscure controller and released in limited quantities. Amiga's Joyboard was an Atari 2600 controller on which the player had to stand and control its games by moving from side to side. Three games were released for the Joyboard: *Mogul Mania*, a skiing game; the unreleased surfing game, *Surf's Up*; and a Simon Says clone called *Off Your Rocker*. Technically finished in 1983, *Off Your Rocker* never actually had an official release as Amiga couldn't afford to pay for the cartridges to be labelled. The labelling company held onto the cartridges and eventually sold them to Pleasant Valley Video, years later, who then sold them on to the 2600 community with homemade labels.



"A CUT-DOWN VERSION OF THE AMIGA 1000, THE 500 CRAMMED A MOTHERBOARD, SEVERAL EXPANSION PORTS AND A DISK DRIVE INTO A SLIM KEYBOARD CASING"

"COMMODORE HAD CREATED ONE OF THE WORLD'S FIRST MULTIMEDIA SET-TOP BOXES BUT IT SEEMED THAT NOBODY, INCLUDING COMMODORE, WAS READY FOR SUCH NEW TECHNOLOGY"

Back From the Dead

On 22 April 2007, Amiga Inc announced the development of the first mass-produced Amiga range in 13 years. Using Power PC technology, Amiga Inc, in association with ACK Software, plans to produce two new Amiga machines. One will be a compact, low-power computer, priced at $500 and the other will be a pro-user computer at $1,500. "ACK and Amiga have spent many months working on designs and working with various manufacturers to create great products with a competitive price point. We will be working with the Amiga retailers over the coming weeks to solidify launch and support plans", said Bill McEwen of Amiga Inc. For more information, log on to www.amiga.com

» *The Chaos Engine*... Quite possibly the Bitmap Brothers' finest hour.

» *Shadow Of The Beast* was a UK-developed game that looked far better than anything the Americans had made.

the next logical step for Europe's smaller development houses and bedroom programmers. Great UK codeshops like Psygnosis, The Bitmap Brothers, Bullfrog and Sensible Software all began working on the Amiga around 1987/88 and slowly but surely the A500 began to build up a catalogue of games that made it one of the most desirable machines available. This was great for Commodore, of course, and even better for UK gamers but did, unfortunately, cause a bit of a headache for American Amiga fans. With most of the Amiga's greatest games coming out of Europe, US gamers suffered the brunt of PAL/NTSC incompatibility problems and had to resort to fitting switches into their precious computers and even buying expensive multiformat monitors.

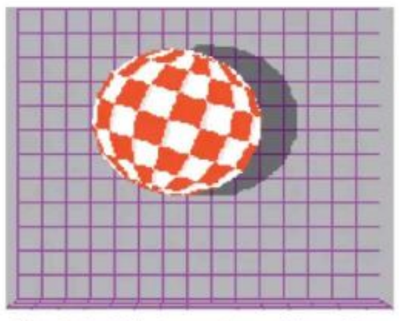
The UK's favourable relationship with the Amiga didn't end with the software developers as Commodore UK also seemed to have a better idea of how to promote the computer than their International counterpart. Seeing that the Amiga 500, like the C64 before it, was destined for success as a games machine rather than a business machine, Commodore UK began producing packages that bundled the computer with several games at a discount price. While Commodore International had packaged the A500 with business software and digital art packages, David Pleasance at Commodore UK negotiated with Warner Bros to create the Batman Pack, which bundled an A500 along with a copy of the new *Batman* game (based on the Tim Burton film) as well as copies of *The New Zealand Story*, *Interceptor* and EA's incredible *Deluxe Paint 2* for just £399. In the run-up to Christmas 1989 the 'Bat Pack', as Amiga fans affectionately named it, helped raise the number of UK Amiga owners to over 2 million – a success that saw Pleasance promoted to managing director of Commodore UK.

The next few years saw several other games bundles released but it was the Bat Pack that really sealed the success of the Amiga 500 and helped sell enough machines to ensure that the Atari ST became a distant memory. But for every success that Commodore UK achieved, it seemed as though Commodore International was close behind with a disastrous plan, destined to sink the Amiga to the bottom of the sea. One of the first of these suicidal business decisions was the infamous CDTV. By stripping the keyboard and disk drive from the Amiga 500, adding a CD-ROM drive and packaging it in a sleek VCR style casing, Commodore had created one of the world's first multimedia set-top boxes but it seemed that nobody, including Commodore, was ready for such new technology. Priced at £699, the CDTV was £300 more than the average Amiga 500 and compatible with far fewer games, whilst software manufacturers seemed to have little idea of how to take advantage of the CD-ROM medium. Needless to say, the CDTV was a huge flop and was discontinued a year later. The whole project was a huge financial loss and public embarrassment for Commodore and would not be their last needless folly.

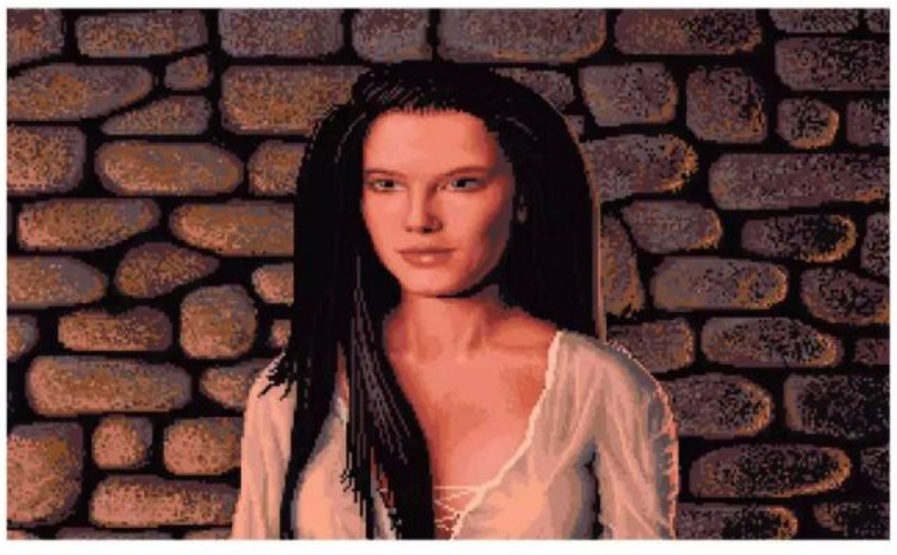
For the time being, however, the traditional Amiga 500 continued to go from strength to strength with 1991 proving to be something of a golden year for the computer. Despite competition from the Super Nintendo and Mega Drive and a slight drop in A500 hardware sales, existing owners were rewarded with some of the greatest games in the history of the Amiga. Commodore UK launched the Amiga 500 Plus, which was virtually identical to the existing 500 but came with a full 1MB of RAM as standard. A whole new wave of quality games followed. *Another World*, *Full Contact*, *SWIV*, *Cruise For A Corpse*, *Lemmings*, *Moonstone*, *Leander*, *Alien Breed*, *Jimmy White's Whirlwind Snooker*, *The Secret of Monkey Island*, *Mega Lo Mania*, *Exile*... the list of defining Amiga titles to appear in 1991 goes on and on. Some of these games even found themselves packaged into the Amiga's second most popular hardware bundle. Cartoon Classics cost £359 and included *Lemmings*, *The Simpsons*, *Captain*

» Classic C64 games like *Uridium* received sequels on Commodore's new system.

» Most of Commodore's print ads missed the point of why the Amiga 500 was such a popular machine.



» The Boing Ball demo as it would have first appeared at the Consumer Electronics Show. It remains impressive.



» The stunning *Defender Of The Crown* justified the purchase of the Amiga for many owners. It was also a fantastic calling card for newcomers Cinemaware.

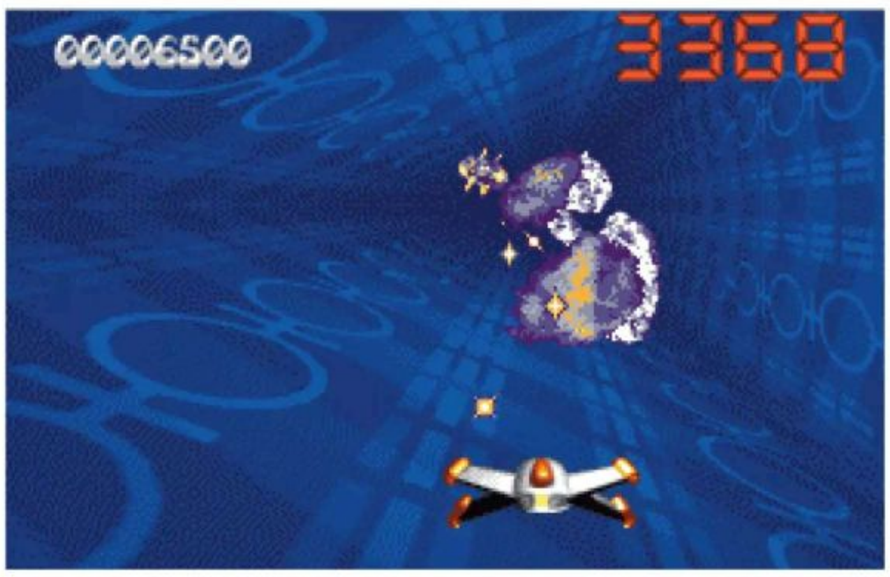
» Early games like *Blood Money* proved that the Amiga was more than capable of replicating the thrills and spills of the local arcade.

» *Cannon Fodder* was just one example of Sensible Software's output on the Amiga.

Planet and *Deluxe Paint 3*. Many of these games and others that followed in the coming months made use of the ECS chipset in the A500 Plus, which created another problem for American Amigans who never received an official release of the hardware update. Eager to play the European hits, they were forced to hardwire an extra 512KB of Chip RAM into their Amigas and even faced the prospect of having to pull out the Agnus chip and pop in the new Fat Agnus to cope with addressing the full megabyte of RAM.

The 500 Plus was soon discontinued, however, as Commodore made efforts to compete with the console market with the Amiga 600. Another variation on the 500 hardware, the A600 was launched in 1992 and featured a much smaller casing, presumably so that it could more comfortably occupy the space underneath a television set rather than hogging a computer desk. Some models of the A600 even came with internal hard drives, which reduced the need for messy disk swapping. But the 600 was ultimately seen as too little too late and was soon dropped by Commodore as its sales fizzled out.

While Commodore failed to re-ignite hardware sales, however, software sales continued to be very strong for Amiga developers. Despite a rising threat from piracy, developers still managed to prosper on the Amiga. Team 17, for example, released a record nine Amiga games in 1993 and even shared a Publisher of the Year award with Electronic Arts that year. Public Domain houses



» *Stardust's* 3D tunnel sections really pushed later Amiga systems.

» Blue Byte's god-sim *The Settlers* proved extremely popular with Amiga owners.

also flourished during this period, distributing huge volumes of indie games long before the term 'home-brew' even existed.

The coming years saw Commodore stumble one too many times and eventually implode despite the brilliance of its second-generation Amigas, the 4000, 1200 and CD32, but that didn't stop the Amiga 500 from continuing to be a critical success. Even without an official hardware presence, over 150 Amiga games were released in 1994, another 90 in 1995 and a further 86 between 1996 and 2000. Amongst those releases were even more of the Amiga's all-time greats such as *Worms*, *Theme Park* and *Beneath A Steel Sky*.

The point-and-click adventure *Code Name Hell Squad* was the final commercial game to be compatible with the Amiga 500, although it did require a CD-ROM drive. That new games were being released 13 years after the launch of A500 and six years after the fall of Commodore is testament to the dedication of the Amiga user base and the passion of its software developers. Incidentally, many of those users are still around, still using their Amigas and even producing new software. The last three years have seen a handful of decent shareware releases such as *Metal Warrior* and *Tank Wars*, while advances in the Amiga emulation scene should see more new shareware games released for years to come.

Amiga itself is still around too. After being sold from company to company over the last 13 years, Amiga Inc is now mostly a software company, although it is working to produce new hardware. It should be noted, though, that the new Amigas are Power PC -based computers that have little in common with Jay Miner's original vision, other than the promising Amiga OS 4, and will not be compatible with any old Amiga software.

Regardless of the trials and tribulations of the hardware itself, however, the Amiga's greatest legacy is the excellent catalogue of games that were available for it and the huge number of European developers who cut their teeth on the Amiga and now create some of the greatest games of today. Rockstar North, Team 17, Lionhead… many of these developers, and more, might not be around today were it not for the power and accessibility offered by the Amiga 500 in 1987.

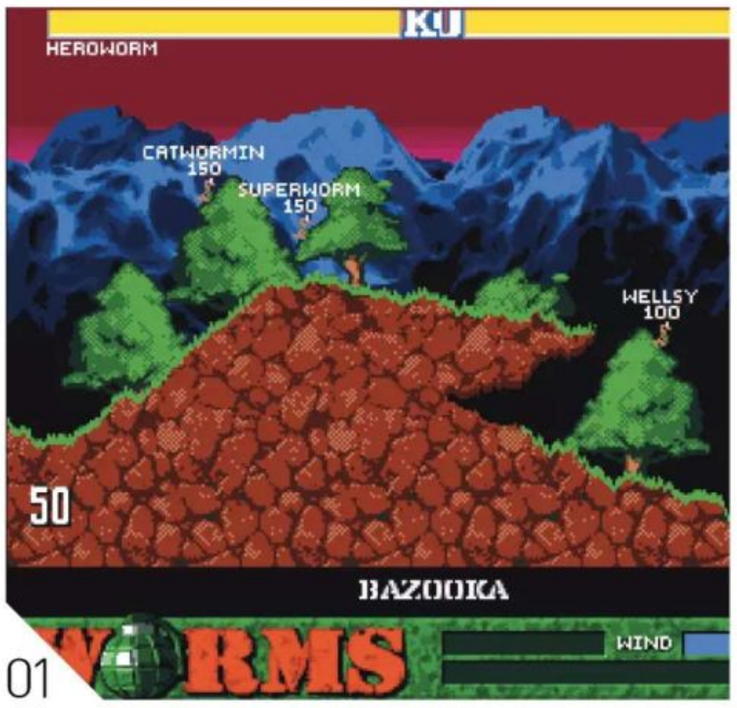
» The original Workbench operating system looks garish now but was a technical marvel in 1985.

» Two limited-edition A500s produced, in Germany, to commemorate the sale of 1 million Amigas in 1989.

AMIGA 500

PERFECT TEN GAMES

Commodore's Amiga 500 was a huge success, so it should come as no surprise that a variety of superb games are available for it. Indeed, it's practically impossible to name just ten games, as for every one we put forward, three other titles were just as deserving. After a lot of soul searching, we decided that the following best represent some of the greatest genres found on the machine. How many have you played?



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WORMS

» **RELEASED:** 1995
» **PUBLISHED BY:** OCEAN
» **CREATED BY:** TEAM 17
» **BY THE SAME DEVELOPER:** BODY BLOWS

01 You'd have thought that by 1995, ten years after the Amiga 1000's launch, it had seen every one of its defining games already. Well, Andy Davidson and Yorkshire-based Team 17 obviously thought there was room for one more and the world agreed with them. *Worms* was an absolute sensation and went on to sell millions of copies across countless formats, sequels and spin-offs. It's important to remember that the multiplayer strategy game began life on the Amiga, however, and was mostly a five year labour of love of just one man and a copy of Blitz Basic. And that was what was really great about the Amiga: it turned bedroom programmers into millionaires and created memorable franchises that endure for a lifetime. Can the same be said of the Xbox? We think not.

JIMMY WHITE'S WHIRLWIND SNOOKER

» **RELEASED:** 1991
» **PUBLISHED BY:** VIRGIN
» **CREATED BY:** ARCHER MACLEAN
» **BY THE SAME DEVELOPER:** DROPZONE

02 It may have been written by Retro Gamer's star columnist, but there's no favouritism here. *Jimmy White's Whirlwind Snooker* deserves to be in the Perfect Ten because it was the first game to really make snooker work on a home computer and remains a damn good sports title to this day. The 3D graphics and accurate real-time physics on each of the balls made *Whirlwind Snooker* a landmark game that pushed the hardware further than most gamers thought possible. It's arguable that the game has never been bettered, if not in its gameplay and graphics then definitely in its humour. Who can forget the cheeky faces the balls would pull if you didn't take a shot?

ANOTHER WORLD

» **RELEASED:** 1991
» **PUBLISHED BY:** VIRGIN
» **CREATED BY:** DELPHINE SOFTWARE
» **BY THE SAME DEVELOPER:** FUTURE WARS

03 *Defender Of The Crown* and *Shadow Of The Beast* may be the two games that wowed consumers enough to buy an Amiga but they were both severely lacking in the gameplay department. *Another World*, on the other hand, had both incredible graphics and utterly gripping gameplay to match. Essentially an evolution of the *Prince Of Persia* style of game, *Another World* swapped sword fighting for laser guns and added a bunch of fiendishly tricky action puzzles. The game looked stunning too; the use of vector graphics was a stroke of genius that ensured that *Another World* looked light years ahead of any other game of the time. It's proving a timeless classic, as several updated versions have been released, most notably for the Xbox One and PlayStation 4.

LEMMINGS

» **RELEASED:** 1991
» **PUBLISHED BY:** PSYGNOSIS
» **CREATED BY:** DMA DESIGN
» **BY THE SAME DEVELOPER:** BODY HARVEST

04 What can be said about *Lemmings* that hasn't been said before? It's appeared on nearly every format known to man and is surely as much a household name as *Tetris* and *Space Invaders*. Sequels and updates continue to appear to this day and the little suicidal rodents show no sign of losing their popularity. Back in 1991, however, the release of *Lemmings* was a complete surprise. The concept was totally original and made for an instant hit. Its biggest achievement: the simple presentation and easy-to-use control system meant that anyone could pick up the game and play it. *Lemmings* had the whole family playing games together 15 years before the Nintendo Wii had even launched. Head to page 36 of this very issue for further proof of DMA Design's greatness.

SPEEDBALL 2

» **RELEASED:** 1990
» **PUBLISHED BY:** IMAGE WORKS
» **CREATED BY:** BITMAP BROTHERS
» **BY THE SAME DEVELOPER:** XENON 2

05 The recent news that a next-gen remake of *Speedball 2* is in the works has had the Retro Gamer staff drooling uncontrollably into their coffee cups every morning since the game's announcement. Why, you may ask? Because the original Amiga game was sheer digital perfection, the likes of which had never been seen before, or since. Oozing style from the Bitmaps' trademark metallic visuals to the cries of "Ice Cream!, Ice Cream!", *Speedball 2's* greatest triumph was its imaginative rule set and peerless two-player gameplay. Many Amiga owners must remember whiling away the hours with a friend and probably do so to this day. A finer sports game it is impossible to find, in the past or present. It's so good, in fact, that we wish it was a real sport.

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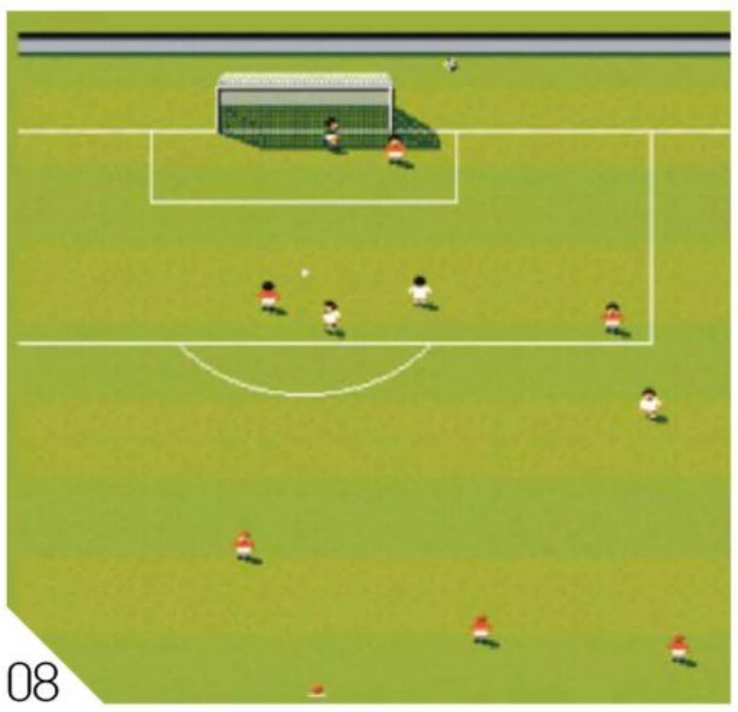

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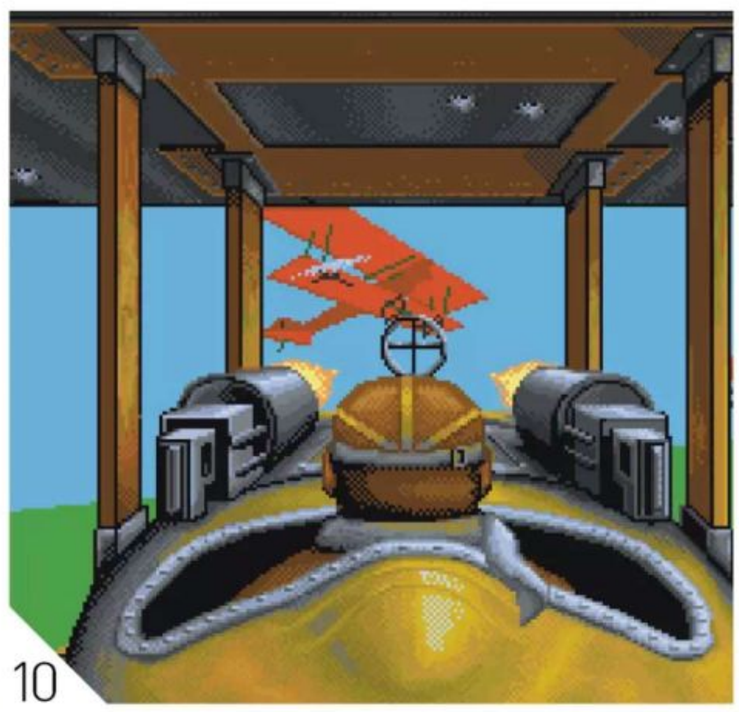

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THE SECRET OF MONKEY ISLAND

» **RELEASED:** 1991
» **PUBLISHED BY:** US GOLD
» **CREATED BY:** LUCASFILM GAMES
» **BY THE SAME DEVELOPER:** INDIANA JONES AND THE LAST CRUSADE

06 The Amiga's incredible graphical capabilities and standard mouse controller made it a perfect machine for point-and-click adventures and there were plenty of them made over the years. Picking out a favourite is an incredibly difficult task but as *The Secret Of Monkey Island* will have been the first adventure that many of us actually played on the Amiga, we have to go for that. Using an enhanced version of the SCUMM engine from *Maniac Mansion*, *The Secret of Monkey Island* looked great and featured plenty of brilliant puzzles. But it was the insane humour that really set it apart from the competition. The world would be a much duller place without Insult Sword fighting now wouldn't it?

ALIEN BREED

» **RELEASED:** 1991
» **PUBLISHED BY:** TEAM 17
» **CREATED BY:** TEAM 17
» **BY THE SAME DEVELOPER:** QWAK

07 With only one previous title, the beat-em-up, *Full Contact*, to its name, few expected much from ex-PD codeshop Team 17 with its second title. That is until *Alien Breed* made its stunning debut and sent jaws hurtling towards the floor, up and down the country. One of the first Amiga games to use a full 1MB of RAM, *Alien Breed* looked incredible back in the day and played even better. Basically a sci-fi version of Gauntlet with a great two-player mode, tons of cool weapons and even sampled speech, *Alien Breed* set Team 17's standard for creating top-quality arcade-style titles on the Amiga. Later sequels were technically better but none quite had the shocking impact of the original. No wonder its Special Edition spent a whopping 33 weeks in the budget charts.

SENSIBLE SOCCER

» **RELEASED:** 1992
» **PUBLISHED BY:** RENEGADE
» **CREATED BY:** SENSIBLE SOFTWARE
» **BY THE SAME DEVELOPER:** CANNON FODDER

08 Football games have been around for as long as games machines themselves and, over the years, have become much more realistic simulations of the sport as technology has improved. There's one football game that managed to be extremely playable without being a simulation, however, and that game was the mighty *Sensible Soccer*. With the emphasis placed well and truly on the fun factor, *Sensible Soccer* was, for many gamers, the greatest football game of the Nineties and remains the superior choice to this day (although just as many prefer *Sensible World of Soccer*). There are still hundreds of people out there who kept hold of their Amigas just to play *Sensible Soccer*. Luckily for everyone else there is an Xbox Live Arcade version that was released a few years ago.

THEME PARK

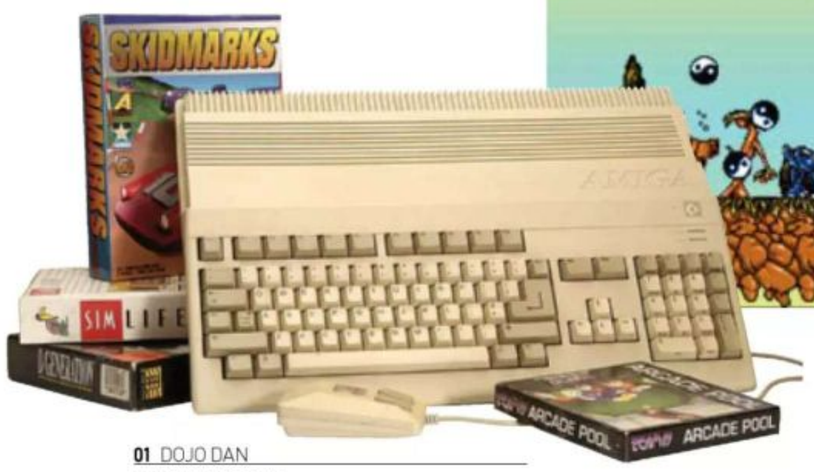
» **RELEASED:** 1994
» **PUBLISHED BY:** ELECTRONIC ARTS
» **CREATED BY:** BULLFROG
» **BY THE SAME DEVELOPER:** SYNDICATE

09 Back in the early Nineties, resource management games were defined by one title alone: Will Wright's highly influential Sim City. A truly brilliant game, *Sim City's* only problem was that constant town planning wasn't actually that much fun. The average sugar-fuelled kid needed something with a little more colour, something with fast-moving vehicles and something where little cartoon people throw up on screen. Those needs were answered by British coding legend Peter Molyneux and his ground breaking Theme Park. Designing stomach-churning rollercoasters was endless fun for the child in all of us, whilst adding extra salt to food in order to improve drinks sales appealed to the unscrupulous capitalist inside. The recent DS remake is well worth a look as well.

WINGS

» **RELEASED:** 1990
» **FREELY RELEASED BY:** CINEMAWARE
» **CREATED BY:** CINEMAWARE
» **BY THE SAME DEVELOPER:** DEFENDER OF THE CROWN

10 You couldn't ask for a more varied game than Cinemaware's *Wings*. Not only did the World War I game feature isometric shooting sections and two-dimensional bombing runs but it also had a tasty three-dimensional dog-fighting mode that was way ahead of its time. It's hard to believe that the game was made in 1990 as the 3D sections looked absolutely incredible and far in advance of anything that had appeared on consoles, PC or even the arcades at the time. Not just a graphical treat, *Wings* also had emotional impact and fully immersed you in its world. In between each level it would show pages of a diary, which told of the main character's eerily realistic wartime experiences, provoking an emotional response in the player that is all too rare in retro and modern gaming alike.



AMIGA 500

and the rest...

Commodore's 16-bit triumph features so many games that we'd need a whole mag just to feature them. Console yourself with the following shots

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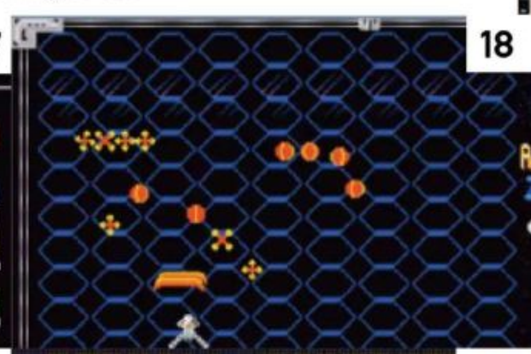
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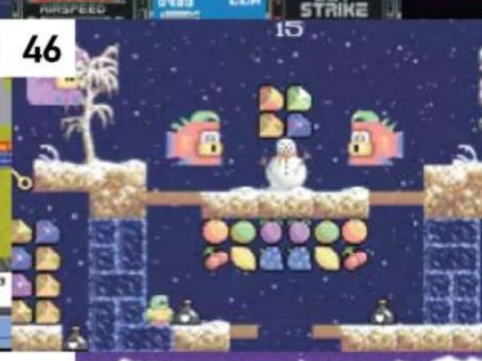

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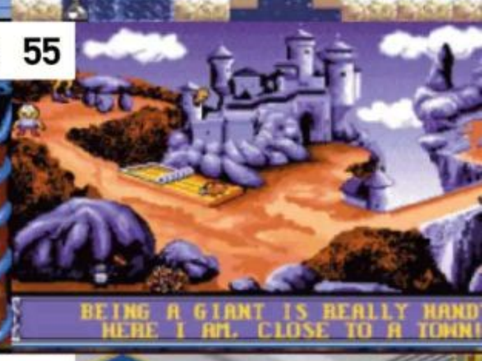

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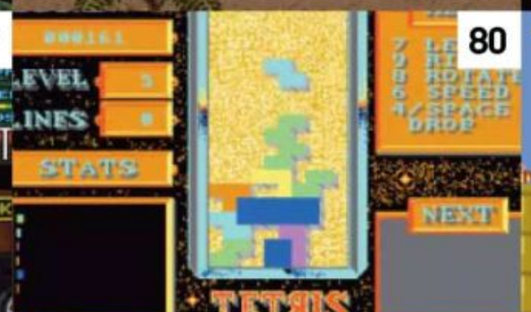

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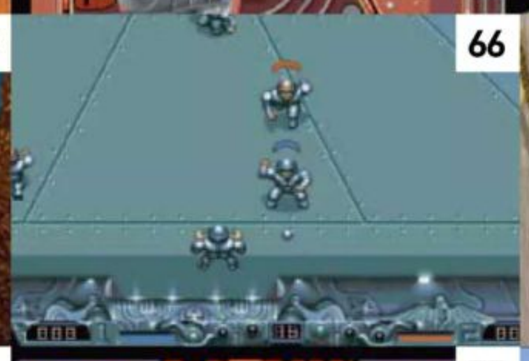
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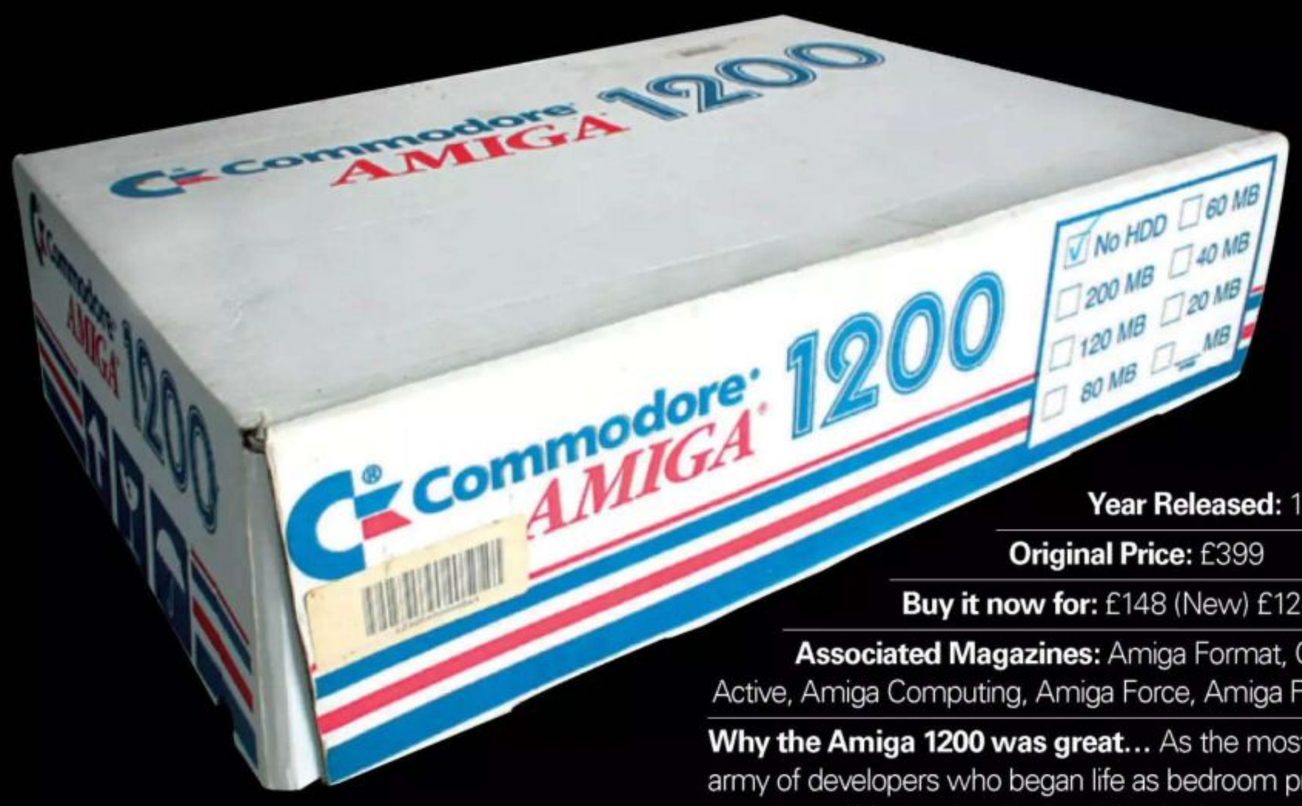


Year Released: 1992

Original Price: £399

Buy it now for: £148 (New) £12+ (Used)

Associated Magazines: Amiga Format, CU Amiga, Amiga Power, Amiga Action, Amiga Active, Amiga Computing, Amiga Force, Amiga Fun, Amiga Mania, The One, Total Amiga

Why the Amiga 1200 was great… As the most powerful open-ended system, the Amiga had an army of developers who began life as bedroom programmers and risen to prominence. As such they were incredibly passionate about the Amiga community, and continued to create brilliant games long after it became apparent that the Amiga 1200 was on its last legs. Between 1994 and 2000, it felt special to be an Amiga owner because of the dedicated fans and developers who kept the dream alive.

AMIGA 1200

COMMODORE'S AMIGA 1200 WAS ORPHANED ONLY 16 MONTHS AFTER ITS INITIAL LAUNCH, YET IT WENT ON TO BECOME THE SECOND BEST-SELLING AMIGA OF ALL TIME AND FEATURED A CATALOGUE OF GREAT GAMES THAT WOULD OFTEN PUSH THE 32-BIT COMPUTER BEYOND ALL EXPECTATIONS. LOVINGLY SUPPORTED BY THE GAMES INDUSTRY, THE 1200 REALLY WAS SOMETHING SPECIAL. ASHLEY DAY SHOWCASES THE COMPUTER THAT REFUSED TO DIE

In 1992, Commodore was an unstoppable force. Sales of the C64 were approaching 16 million units, and the Amiga 500 was everyone's 16-bit computer of choice. Technology was marching on and Commodore was about to launch their next generation Amiga. The situation was looking rosy, yet few could have predicted that the Amiga 1200 would be Commodore's last great computer.

The phenomenally popular A500 had been around for five years by 1992 and, as a games machine, was starting to look a little underpowered in comparison to the newest hardware, particularly the Super Nintendo. Always eager to stay ahead of the competition, Commodore launched two new Amigas with the intention of dominating the video game and business machine markets yet again. The Amiga 4000 was designed for the high-end market, and came with a 68030 or 68040 processor running at 25MHz, 6MB of RAM and a hard disk drive. The A1200 was designed for low-end users, and was the option that most gamers went for. It included a 68020 processor at 14.32MHz, 2MB of RAM and an optional hard disk. Like the A500 before it, the 32-bit machine featured several custom chips with real names rather than arbitrary numbers: Alice and Lisa controlled the AGA display, Gayle was a combined system address decoder and IDE controller whilst Budgie took care of the memory processes. Both computers were host to the AGA (Advanced Graphics Architecture) chipset that allowed 256 colours to be displayed simultaneously, and each one was backwards compatible with the old Amiga 500 games.

Despite the impressive specs, the A1200's initial launch bundle, named Desktop Dynamite, did little to convince gamers of a significant leap in power from the A500. Though bundled software, like *Deluxe Paint 4 AGA* and *Wordworth 2.0 AGA*, showed off the excellent creative capabilities of the hardware, the bundled games were an insult. *Oscar* was a simple, bug-riddled platformer that took advantage of none of the A1200's enhancements, whilst *Dennis* was another shoddy platformer based on an even shoddier kids' movie. It did have the benefit of being AGA enhanced, but still looked incredibly poor and gave the wrong impression about the fledgling A1200 model.

Following the trend of the Desktop Dynamite bundle, many publishers were reluctant to develop AGA exclusive titles, as it would limit the sales to just those users with new machines. So for a couple

The shareware scene

The Amiga was a great machine for shareware fans. Its open-ended system and large user base ensured that it had a healthy home-brew community that stayed faithful right to the end and beyond. There were loads of shareware distributors who sold games for £1 per disk, whilst magazine cover disks and, later, the internet were a good way to find shareware cheaply.

Of all the excellent A1200 shareware games, that far outclassed many commercial titles, *Deluxe Galaga* is perhaps the most fondly remembered. The update of the Namco arcade game was actually much better than the original. This was largely due to the range of power-ups, including a *Darius*-like catch ability that acquired enemy ships as allies, that added variety to the shooter and made it a lot more fun to play. Go to www.aminet.net to download *Deluxe Galaga* and thousands of other brilliant Amiga games.

» If you fancy playing a great sharware version of an arcade hit then *Deluxe Galaga* is the perfect one to cut your teeth on

AMIGA 1200

» **Right:** Commodore never really marketed the A1200 as a games machine, despite its obvious benefits. **Right:** Escom advertised the A1200 as a cheap computer, but the price was the same as three years previously

MAN FROM ESCOM PERFORMS MAGIC WITH A1200
HE PULLS HIGH-SPEC, LOW PRICE PACKAGE OUT OF A HAT
AMIGA MAGIC PACK
£499.00 +VAT
£339.00 +VAT
£799.00 +VAT
WOULD YOU CREDIT IT? MORE WAYS TO PAY.
easyware ESCOM
ESCOM HAVE OVER 200 STORES NATIONWIDE

» **Right:** Amiga Format were enamoured with the new Amigas, and would be for the next eight years.

of years most games were designed to work on the original Amigas, and only look slightly better on the AGAs. This soon began to change as more A500 owners upgraded to the A1200, and in November 1993 the first real AGA only game was released. *Overkill* was a *Defender* clone, with graphics that owed much to the Amiga's skilled demo scene: each level featured several layers of smooth parallax scrolling, and used the A1200's palette of 16.8 million colours to create backgrounds awash with trippy effects. Though its gameplay was nothing new and the sprites were a little lacking, *Overkill* showed that the new Amigas had definite promise and would soon go on to host some truly great games.

Later that year, everyone's favourite Amiga developer, Team 17, unleashed the first AGA killer app. *Alien Breed II* was available for both Original Chipset (OCS) machines and AGA machines, but the AGA version was released first and featured several enhancements over its OCS counterpart. Each level used the A1200's wide range of colours to draw subtlety different scenery, whilst the improved sprite handling capabilities allowed Team 17 to display several more aliens on screen at once. Although this made it the more difficult of the two versions, it did make for a much more intense experience.

Following *Alien Breed II*, the A1200 exclusive titles began to appear more frequently but it wasn't enough to inspire impressive hardware sales. As a serious business machine, the Amiga 1200 was much more expensive than the 386 and 486 PCs, and as a games machine it lacked the wide variety of AAA titles that the Japanese consoles featured. Though the machine had some success in the animation industry (the Amiga was used to create the CGI in the first episode of *Babylon 5*, for example) and was popular with the hardcore fans, it didn't stand head and shoulders above the competition as the A500 had. Though the A1200 was the second best-selling Amiga of all time, it still trailed far behind its predecessor.

By 1994, Commodore was struggling to stay afloat. Having invested profits in several innovative yet ultimately doomed projects, it had lost millions of pounds and was unable to pay off many of its creditors. Rumour has it that Commodore's money problems were so bad that the American government dramatically blocked sales of the CD32 in the States, because Commodore had failed to pay damages owed from a lawsuit. Meanwhile, the Philippines government actually seized hundreds of hardware units because of money owed to a manufacturing plant. On April 29th 1994, Commodore filed for liquidation and eventually ceased all operations. Escom, a German PC manufacturer, bought up Commodore's rights in 1995 and continued to sell A1200s, but at £399, it was far too expensive to compete with the emerging PlayStation and Saturn. Escom didn't take the platform seriously, and most now consider it to be a dead machine.

» *OnEscapee*: a beautiful, *Flashback*-style game from 1997.

» *Alien Breed 3D* was one of the better games to be exclusive to the A1200.

Remarkably enough, the fall of Commodore did nothing to deter the production of new games, and the Amiga went on to become one of the few machines to enjoy a long period of releases long after production of the hardware had ceased. The Amiga still had an enormously active userbase, and there was plenty of money to be made from new titles: it could even be argued that the Amiga's best games only appeared after Commodore died (*Worms* wasn't released until 1995, for example).

Seeing that the Amiga needed a shot in the arm if it was to compete in the modern computing field, several third-party manufacturers created upgrades for the A1200 that would increase its power and usability. External CD-ROM drives were released (Commodore had actually planned one of these during the making of the CD32), and several different expansions were made available that would upgrade the processor to 68030, 040 and 060 varieties. For those gamers who had stuck with the A1200, these upgrades were essential as they allowed the Amiga to play games that had been unimaginable in 1992. *Alien Breed 3D* had kick-started a trend for *Doom* clones on the Amiga, and the expansion cards (which also featured extra RAM) greatly improved the performance of many of the Amiga's FPS games. *Alien Breed 3D II*, *Genetic Species* and *Breathless* all looked great when using the extra hardware, which was so powerful that a perfect conversion of *Quake* was eventually released on the computer. The CD-ROM drive allowed the A1200 to play the entire range of CD32 titles (which were being sold off very cheaply by then), and opened the door to bigger games with full speech and FMV cut scenes. Many publishers, like Vulcan Software, announced that they would be exclusively moving over to CD only games. Meanwhile, Amiga Format and CU Amiga began to carry cover CDs that quickly became an invaluable way for Amiga owners to acquire vast quantities of excellent demos and shareware without access to the internet.

With the expanded hardware open to new possibilities and high street retailers continuing to stock Amiga games until around 1998, there were some excellent Amiga 1200 games released despite Commodore's demise. Team 17 pushed unexpanded Amigas to their limits with the *Alien Breed 3D* games, and delivered an Amiga exclusive *Worms* title in the shape of *Worms: Director's Cut*. The Bitmap Brothers released an AGA version of *The Chaos Engine 2* in 1996, the same year that the SNK-inspired *Fightin' Spirit* arrived on Amiga CD-ROM. Psygnosis released the little known *All New World of Lemmings*. PC point-n-click game *Big Red Adventure* was ported to Amiga CD and, of course, the Amiga's highly productive shareware community created hundreds of great AGA games and demos. There were loads of quality games released for the Amiga in its final years but by then the PlayStation and Nintendo 64 dominated the games market, and most of the interesting Amiga games went unnoticed by all but the most attentive fans.

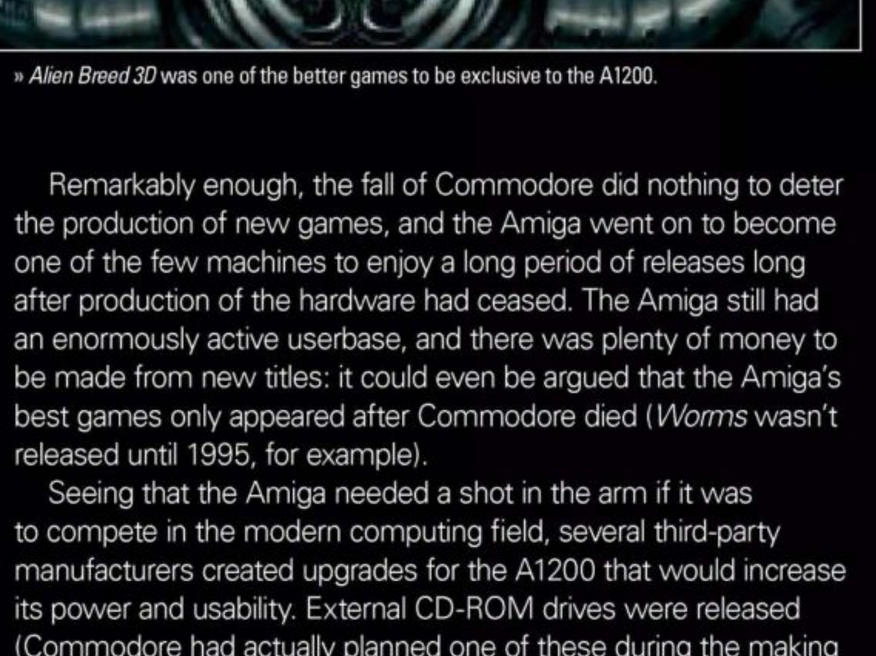
Although brand new Amiga 1200s can still be bought (try www.stellardreams.co.uk) and new games are produced occasionally, the A1200's time has well and truly passed. Yet it had a decent following for a machine that was cut down so soon after its launch. The last issue of CU Amiga was published in August 1998, whilst Amiga Format unbelievably continued until May 2000: a staggering six years after the fall of Commodore. Their prolonged lifespan was testament to the dedication of the Amiga fans and developers who both believed that, when Commodore died, the A1200 had not realised its full potential and could achieve greater things. Their continued support made the Amiga 1200 a computer with a wealth of unknown gems, and for retro gamers it is now as much a voyage of discovery as a welcome nostalgia trip.

After the 1200

The A1200 was the last popular Amiga computer, but it certainly wasn't the last model of Amiga hardware. Escom released the A4000T in 1996; this was an expanded Amiga 4000 in a tower casing instead of a desktop one, and was actually designed by Commodore shortly before their demise. Though the A4000T proved popular with developers and journalists, it was never marketed and is rumoured to have only sold around 2000 units.

Several attempts were made to create a new Amiga line of hardware in the late Nineties, but the plans always seemed to fall through. As such the next Amiga would not appear until 2002 when Eyetech produced the AmigaOne, a PPC-based Amiga that was officially sanctioned by Amiga Inc, and intended to run the new Amiga OS4. Sadly, at the time of writing, the AmigaOne is temporarily unavailable, and Amiga OS4 is still awaiting a commercial release.

» Escom's A4000T was released in 1996 and was essentially an expanded Amiga 4000 with a tower casing.



» *Quake* running on an expanded A1200 yesterday. Looks good, doesn't it?

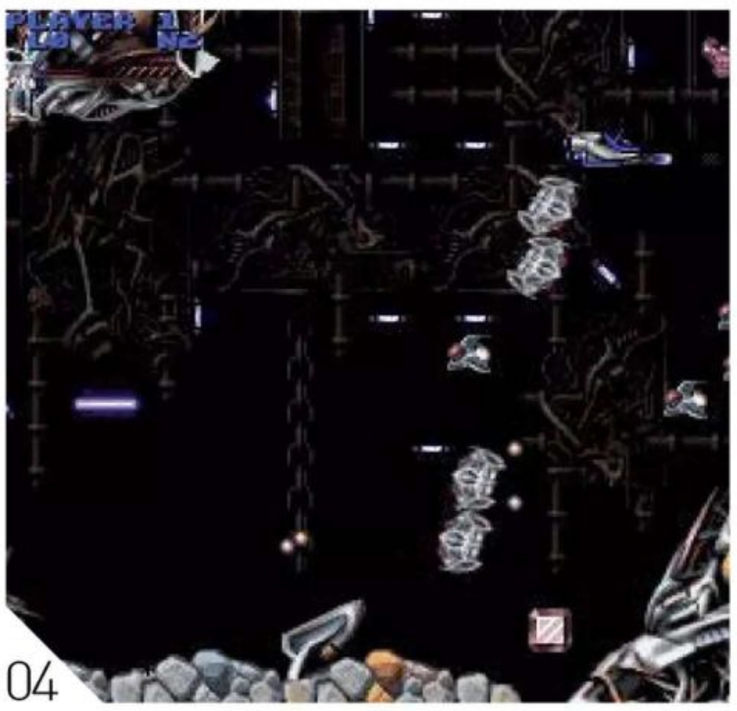
PERFECT TEN GAMES

Despite a somewhat ropey start, Amiga's 1200 soon started delivering a string of quality titles that simply weren't possible on inferior machines. Before you write in though, any top ten is going to be entirely subjective and of course open to violent debate, and that's what Retro Gamer is all about. Like-minded gamers, indulging in sheer nostalgia. Bring it on.

01

02

03


04

WORMS: DIRECTOR'S CUT

» **RELEASED:** 1997
» **PUBLISHED BY:** TEAM 17
» **CREATED BY:** TEAM 17
» **BY THE SAME DEVELOPER:** WORMS

01 It would be criminal to have an Amiga top ten and not mention at least one game from the mega-hit *Worms* series. This exclusive Amiga title was the perfect farewell from Team 17 for the machine that had served it so well over the years, so it's unsurprising that many Amiga and Worms fans consider it to be the best game from the entire franchise. Glorious 2D visuals, well-designed maps and some truly outrageous weapons – no one will forget the first time they used an old woman or a baseball bat on a hapless opponent – all combined to create what was easily the pinnacle of the series. Team 17's *Worms* update for the PSP and DS, *Worms: Open Warfare 2*, is just as good. We look forward to the release of *Worms World Party Remastered* this year.

FIGHTIN' SPIRIT

» **RELEASED:** 1996
» **PUBLISHED BY:** NEO SOFTWARE PRODUCTIONS
» **CREATED BY:** LIGHT SHOCK SOFTWARE
» **BY THE SAMEDEVELOPER:** BLACK VIPER

02 Although several versions of *Street Fighter II* appeared on Commodore's machine, the Commodore's inability to perfectly emulate the arcade's control system meant that plenty of other brawlers received greater recognition. One such fighter is Light Shock Software's *Fightin' Spirit*, a nifty little scrapper that has a decent range of opponents, a laughably cheesy plot and some solid special moves. Many of the characters are able to morph into vicious animals, which adds greatly to the comedic elements that run throughout the game. While *Super Street Fighter II Turbo* looked a lot nicer, simpler controls made *Fightin' Spirit* the better game; at least on the 1200…

ALIEN BREED

» **RELEASED:** 1995
» **PUBLISHED BY:** OCEAN
» **CREATED BY:** TEAM 17
» **BY THE SAME DEVELOPER:** SUPER FROG

03 No doubt wanting to cash-in on the popularity of *Doom* on the PC, Team 17 decided to create its own First-Person shooter for the Amiga 1200. The result, *Alien Breed 3D*, may not have been without its problems, but it remains arguably the greatest First-Person shooter available on the machine. While the small playing window was dreadfully annoying – although many argued that it added atmosphere to the game – the finely structured level design, stunning visuals and gruesome deaths delivered a *Doom*-like experience that many felt the Amiga could never achieve. You needed an Amiga with a fair amount of grunt to get the game working, but on a decent system, *Alien Breed 3D* was a virtually untouchable game.

T-ZERO

» **RELEASED:** 1999
» **PUBLISHED BY:** PXL COMPUTERS
» **CREATED BY:** CLICKBOOM
» **BY THE SAME DEVELOPER:** NAPALM

04 *T-Zer0* is generally regarded as the reason to upgrade the Amiga 1200. By adding a CD-ROM drive and extra RAM, the humble A1200 was able to run the most beautiful horizontal shooter there has ever been on a Commodore computer. Put simply, *T-Zer0* looked stunning; with its biomechanical levels, screens packed with bullets and animated backgrounds, it was technically and artistically brilliant. Unusually, for a late Amiga game, the excellent graphics were matched by the great gameplay. Essentially an *R-Type* clone, *T-Zer0* stood out because of the power-downs – items that were the opposite of power-ups, and best avoided if you wanted to do well. A digital remake of *T-Zer0* soundtracks has been included in *Amiga Immortal 4* CD published in December 2010 by Maz Sound Tools Distributor

SIMON THE SORCERER

» **RELEASED:** 1993
» **PUBLISHED BY:** ADVENTURE SOFT
» **CREATED BY:** SIMON WOODROFFE
» **BY THE SAME DEVELOPER:** WAXWORKS

05 Whilst many excellent point and click adventures are available on the Amiga, few were actually converted to AGAs. Luckily, Adventure Soft's *Simon the Sorcerer* did receive a graphical overhaul, and the end result is a glorious looking title that's choc-a-block with gorgeous visuals, fantastic and memorable voice acting and some wonderfully designed puzzles that will have you scratching a trench into your head. Don't be fooled by its humble roots and the lack of a LucasArts logo – *Simon the Sorcerer* is point and click adventuring at its very best. Could it be funnier than even *Monkey Island*? Turn to page 154 for an extended look at the development and production of this iconic Amiga game.

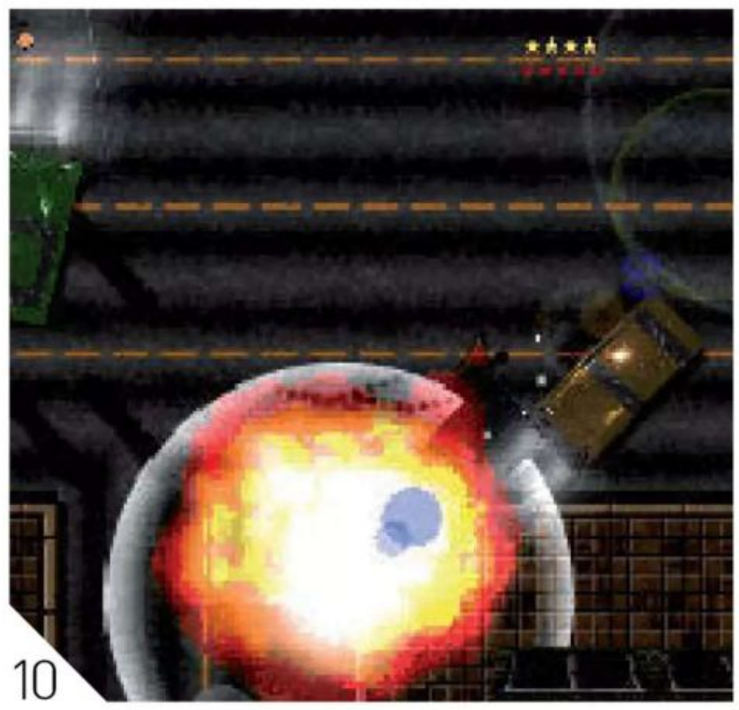
It's only me, the littlest billy goat Gruff.
Walk to
Walk to Look at Open Move
Consume Pick up Close Use
Talk to Remove Wear Give
05

06

07

08

09


10

DELUXE GALAGA

» **RELEASED:** 1995
» **PUBLISHED BY:** NA
» **CREATED BY:** EDGAR M. VIGDAL
» **BY THE SAME AUTHOR:** DELUXE PAC-MAN

06 Bedroom coder Edgar M. Vigdal had a reputation for porting popular arcade games to the Amiga, then adding loads of great extra features without removing any of the original charm. The most fondly remembered of his games is *Deluxe Galaga*, a remake of Namco's classic 1981 coin-op. As well as remaining faithful to the *Galaga* gameplay, Vigdal's version added collectible money that could be used to buy unique weapons between rounds, and bonus levels that took the form of mini-games within the confines of *Galaga's* basic structure. *Deluxe Galaga* was an Amiga phenomenon back in '95, and is still an essential shooter today. *Warblade*, written by Vigdal, is a rewrite and modernisation of *Deluxe Galaga*, released on Windows, OS X and iOS.

OnESCAPEE

» **RELEASED:** 1997
» **PUBLISHED BY:** SADNESS SOFTWARE
» **CREATED BY:** INVICTUS TEAM
» **BY THE SAME DEVELOPER:** 1NSANE

07 Fans of *Flashback* would be well-advised to check out Invictus Team's superb *OnEscapee*, as it shares many elements with Delphine's classic. From its atmospheric opening sequence to its stunningly drawn locations, *OnEscapee* manages to impress on practically every level. If there's one complaint we'd make, it's that the game's difficulty spikes rather abruptly upon reaching the third stage. Puzzles are a lot trickier to work out, and death can often come quickly and without warning. Still, the attention to detail, outstanding looking visuals and masterful use of sound instantly draws you in and soon makes you forget *OnEscapee's* minor niggles. Invictus re-released the software in 2004 as freeware for PC to coincide with the 10th anniversary of the company's founding

XP8

» **RELEASED:** 1996
» **PUBLISHED BY:** EFFIGY SOFTWARE
» **CREATED BY:** WEATHERMINE SOFTWARE
» **BY THE SAME DEVELOPER:** BUBBLE GUN

08 During the A1200's twilight years, most of the big name developers had moved onto pastures new and it was left to the smaller software houses to keep the games coming. Due to their limited budget, most opted to produce simple yet highly playable arcade games, like Weathermine Software's *XP8*. This vertical scrolling shooter seems quite underwhelming at first, but once you get past the lacklustre opening level the game reveals itself to be pretty good fun and it's best played with a joypad or joystick. The formula of the game was hardly revolutionary, but *XP8* delivered solid blasting action that looked superb thanks to the rendered graphics and silky smooth animation. Absolutely superb.

STAR TREK: 25TH ANNIVERSARY

» **RELEASED:** 1994
» **PUBLISHED BY:** INTERPLAY
» **CREATED BY:** METADIGM
» **BY THE SAME DEVELOPER:** NA

09 Whether you love or loathe *Star Trek*, there's no denying that this excellent icon- driven graphic adventure is a fantastic use of the licence. The seven available missions are structured like a typical episode from the original series, and are frightfully authentic. The theme tune and credits are there; Captain Kirk dictates his captain's log, and each character behaves perfectly. While the puzzles aren't quite as complex as some of LucasArts' games, it still takes a fair amount of time to complete and will certainly tax those gamers not familiar with the genre. Don't be put off by the attached licence, as this is a wonderful title and an essential addition to your collection, even if you're not a fan of Captain James Tiberius Kirk.

PAYBACK

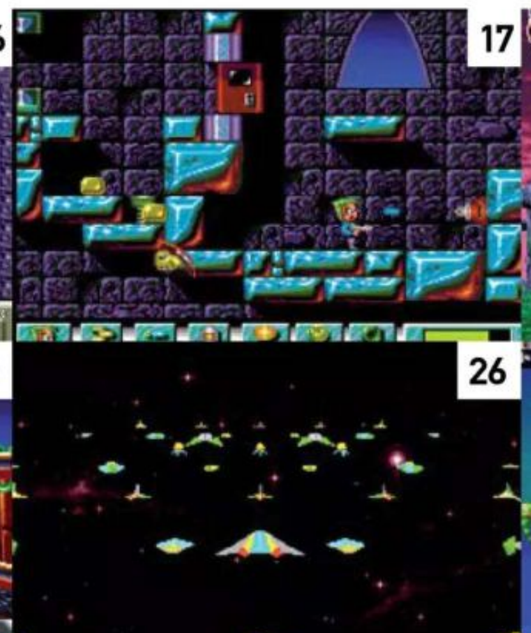
» **RELEASED:** 2001
» **PUBLISHED BY:** APEX DESIGNS
» **CREATED BY:** APEX DESIGNS
» **BY THE SAME DEVELOPER:** FRONTAL ASSAULT

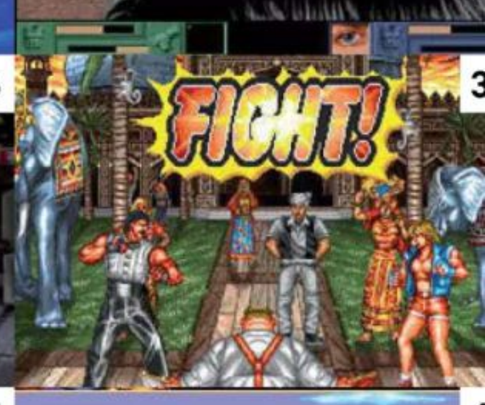
10 For those who have played it, Apex Designs' *Payback* is much more than just a simple clone of *Grand Theft Auto*. Hell, many of them swear that it's actually miles better. It's certainly an impressive achievement on the 1200, thanks to it having a proper 3D perspective, superb attention to detail and extremely satisfying gameplay. Speaking of gameplay, it's near identical to that of GTA's, and sees the player activating missions by accessing an available telephone kiosk. Said missions can involve anything from stealing a few cars to simply killing someone, yet there's enough variety in them to ensure that objectives don't become too repetitive with heavy play. A sterling effort, that has since been made available on the Game Boy Advance.

AMIGA 1200

and the rest...

Considering that Amiga's 1200 was cut so short, it still supported a varied range of games and certainly gave those pesky consoles a damn good run for their money





Hello, young friend. You've probably heard about how my twisted son Gallus has caused so much trouble for everyone. When he murdered Kale that was the last straw!
45

01 ALL NEW WORLD OF LEMMINGS
02 SUPER STARDUST
03 DREAMWEB
04 MYST
05 COLONIZATION
06 JAMES POND 3: OPERATION STARFISH
07 ROADKILL
08 PINBALL MANIA
09 SIMON THE SORCERER
10 1869
11 ALFRED CHICKEN
12 CHAOS ENGINE
13 JUNGLE STRIKE
14 GLOOM
15 DENNIS
16 QUASAR WARS
17 ACTION CAT
18 PRIMAL RAGE
19 RALLY CHAMPIONSHIPS
20 SLAMTILT
21 WHIZZ
22 BLOODFEST
23 FLYIN' HIGH
24 COALA
25 OSCAR
26 GUARDIAN
27 OVERKILL
28 WASTED DREAMS
29 AIR BUCKS V1.2
30 DEATH MASK
31 BUBBLE HEROES
32 NAPALM
33 T-ZERO
34 PINBALL ILLUSIONS
35 GENETIC SPECIES
36 RISE OF THE ROBOTS
37 FIGHTIN' SPIRIT
38 CAPITAL PUNISHMENT
39 KANG FU
40 THE LION KING
41 BURNOUT
42 HUMANS III: EVOLUTION LOST IN TIME...
43 STRANGERS
44 GLOOM 3: ZOMBIE EDITION
45 THE SPERIS LEGACY
46 ALADDIN
47 BLITZ BOMBERS
48 DETROIT
49 SIMLIFE
50 LORDS OF THE REALM
51 SUBWAR 2050
52 EXILE
53 MARVIN'S MARVELOUS ADVENTURE
54 SUPER STREET FIGHTER II TURBO
55 PINBALL BRAIN DAMAGE
56 CIVILISATION
57 BLOBZ
58 ONESCAPEE
59 XTREME RACING
60 DANGEROUS STREETS
61 ZOMBIE APOCALYPSE II
62 DIGGERS
63 THE CHAOS ENGINE 2
64 SIM CITY 2000
65 BRIAN THE LION
66 ALIEN BREED: TOWER ASSUALT
67 DOOM II: HELL ON EARTH
68 PINBALL FANTASIES
69 WEMBLEY INTERNATIONAL SOCCER
70 TIN TOY ADVENTURE
71 ARCADE POOL
72 DUNGEON MASTER II: THE LEGEND OF SKULLKEEP
73 WORMS: THE DIRECTOR'S CUT
74 ALIEN BREED 3D
75 LEGENDS
76 DESERT RACING OF BARDOS
77 TALES FROM HEAVEN
78 CODE NAME HELL SQUAD
79 BOGRATS: THE PUZZLING
80 BLACK VIPER
81 SUPER SKIDMARKS
82 BANSHEE
83 BREATHLESS
84 ISHAR: LEGEND OF THE FORTRESS
85 XP8
86 BIG RED ADVENTURE
87 ALIEN BREED 3D 2: THE KILLING GROUNDS

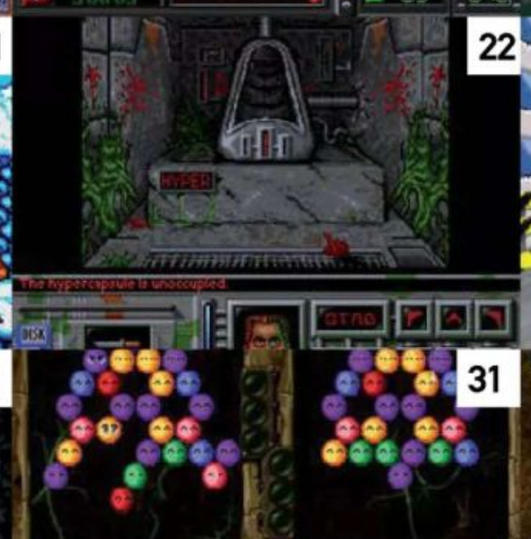
Colonization
Shall we make landfall, Your Excellency, and leave the ships behind?
Stay With Ships
Make Landfall

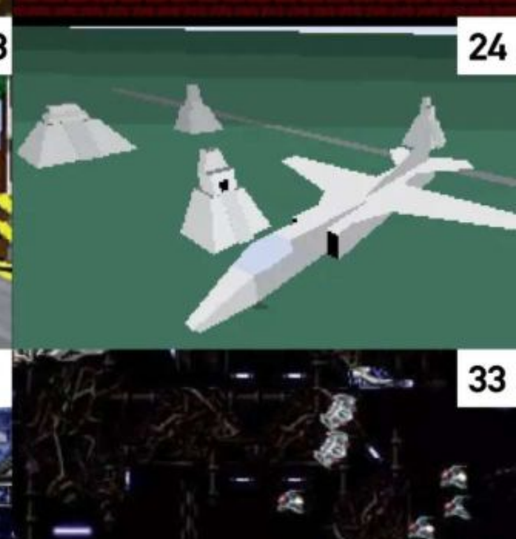
KILL ZONE
STARTS

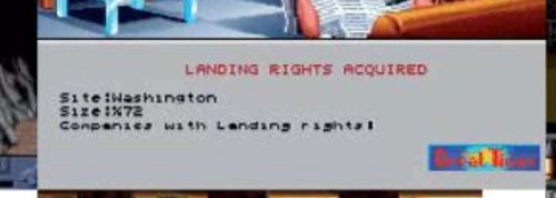
1 I'm a wizard. I steal from who I want!
2 No, nice. Sorry, nice.
3 I was only borrowing it.
4 Excuse me, I've got a train to catch.

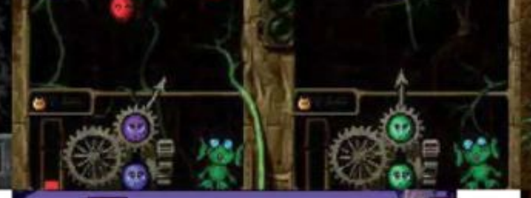
1 MONUMENT
WEAPON
ARMOR
FUEL
LOAD
LIVES
MAP
MISSION STATUS
SCORE

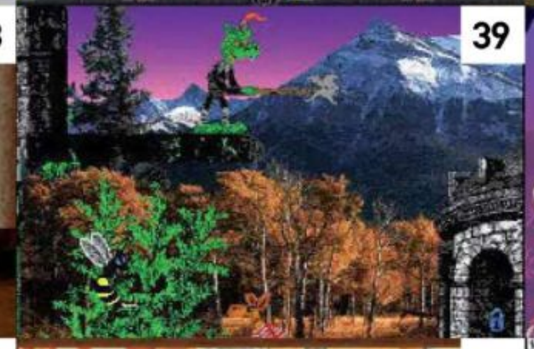
SCORE
COURAGE


HYPER
The hypercapsule is unoccupied.




LANDING RIGHTS ACQUIRED
Site:Washington
Size:X72
Companies with Landing rights!





We note that your primitive civilization has not even discovered Alphabet. Do you care to exchange knowledge with us?
• 'No, we do not need Alphabet.'
• 'OK, let's exchange knowledge.'

LAP 1
02:00:00

KO

PICKED UP A CLIP

1:ST
2:ND
3:RD
4:TH

GOAL!

BOMBS 00 DIAMONDS 02 LIVES 01

Don't worry, he ain't dead, just suspended, sort of restin'.

I WOULD REALLY LIKE TO COME WITH YOU!

AMIGA | 25

AMIGA CD32

IT WAS COMMODORE'S FINAL HARDWARE DESIGN BEFORE THE COMPANY WENT BELLY UP AND IS ONE OF THE MOST DERIDED AMIGAS OF ALL TIME BUT IS THE CD32'S TERRIBLE REPUTATION SO DESERVED? ASHLEY DAY ARGUES THE CASE FOR HISTORY'S MOST MISUNDERSTOOD CONSOLE

Although it launched in 1993, the story of the Amiga CD32 really begins in the late Eighties when Commodore dominated the home computer hardware market with both the Commodore 64 and the Amiga 500, but were well aware that it had only cornered one half of the industry. Its computers were primarily business machines, albeit with massive gaming potential, with high prices that only the wealthiest families could afford. Consequently console manufacturers had taken the opposite approach by pricing hardware as low as possible and making profit on the games themselves. The space beneath the family TV set was increasingly taken up by a dedicated games console and Commodore knew that it had to come up with something similar in order to compete. Furthermore, the respective storage mediums of the cassette tape and the floppy disk did nothing to facilitate profit for Commodore themselves; the standard storage devices were easy to come by, so Commodore could not enforce licensing fees and, worse still, piracy of such software was incredibly easy, even for the home user.

Two attempts to break into the console market soon followed, with the Amiga CDTV, an Amiga 500 powered set top box, and the cartridge-based Commodore 64GS, but neither had the desired impact. The C64GS quickly died out due to its underpowered hardware and lack of games, whilst the CDTV passed by unnoticed thanks to its £699 price tag and the fact that nobody really knew how to best make use of the fledgling CD-ROM format. Still, Commodore soldiered on with the console idea, eventually settling on the CD32, a piece of hardware that, at the very least, had the potential to get Commodore into that coveted spot underneath the TV once again. Having learnt from its past mistakes with the CDTV and C64GS, the CD32 got a number of things right straight away. The chipset inside the box was based on the Amiga 1200, which had been released in the previous year, meaning that software would look bang up to date,

Backwards compatible?

Oh yes. The beauty of the Amiga hardware under the hood of the CD32 meant that it was compatible with all previous Amiga software. Okay, there weren't many previous Amiga games on compact disc except, of course, for the CDTV, which the CD32 was 100 per cent compatible with. Although Commodore's previous CD-based console had played host to mostly dull edutainment titles, there were a couple of games worth holding on to. Old Amiga favourites *Sim City* and *Lemmings* were available and worked perfectly on a CD32 with an Amiga mouse. The best CDTV game, however, was *The Case Of The Cautious Condor*, a little-known adventure game, in which the player had 30 minutes to solve a murder by exploring a hand-drawn comic book world and eavesdropping on characters' CD audio conversations. For anyone with a CD-based Amiga, this unique adventure comes highly recommended.

HAVING LEARNT FROM ITS PAST MISTAKES WITH THE CDTV AND C64GS, THE CD32 GOT A NUMBER OF THINGS RIGHT STRAIGHT AWAY

Year released: 1993

Original price: £250

Buy it now for: £25+

Associated magazines:
Amiga Power, Amiga Format, CU Amiga, CD32 Gamer, Amiga CD32 Magazine

Why the CD32 was great… Almost all of the Amiga's best games were available on the CD32, but without the hassle of disk-swapping, compatibility issues or decade-old joysticks. The CD32 was the Xbox of its day, bringing all the era's best computer games to your TV without all the nonsense that computer owners had to put up with. Better still, many of the games were significantly better than the original Amiga versions. It may have been the black sheep of the Amiga family but it was a sheep worth having. Erm…

AMIGA CD32

» Chris Evans and Commodore UK's David Pleasance at the CD32 launch event.

» *Diggers* was an original but uninspiring launch title.

» *Extractors* was a sequel to *Diggers* that was never released. The full game can be found on the 'net though.

It's SLAMMIN' TIME
The game system that conquered Europe is NOW HERE !!
AMIGA CD32™
The Ultimate Game Machine
32bit
AMIGA CD32
16 million colors • BLAZE!
32 bit game play • SHAOS!
Double speed CD • SCREAMS!
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CALL
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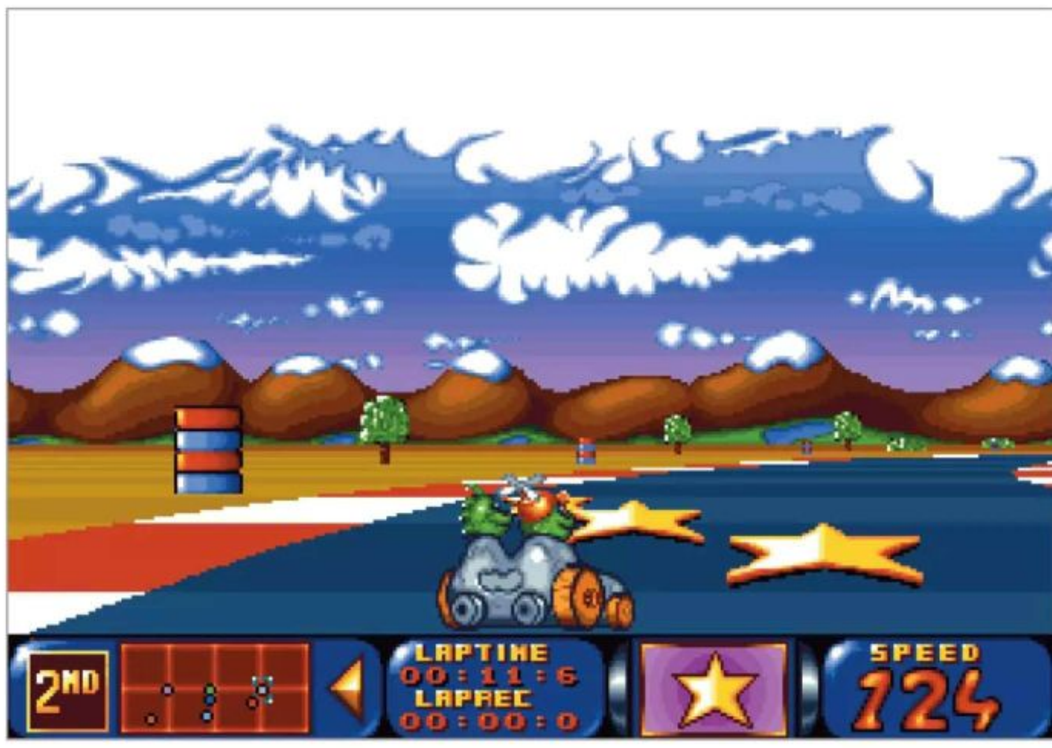
These and dozens of other AMIGA CD32 titles are available now!
Commodore

» A bold American ad for the CD32. Too little, too late.



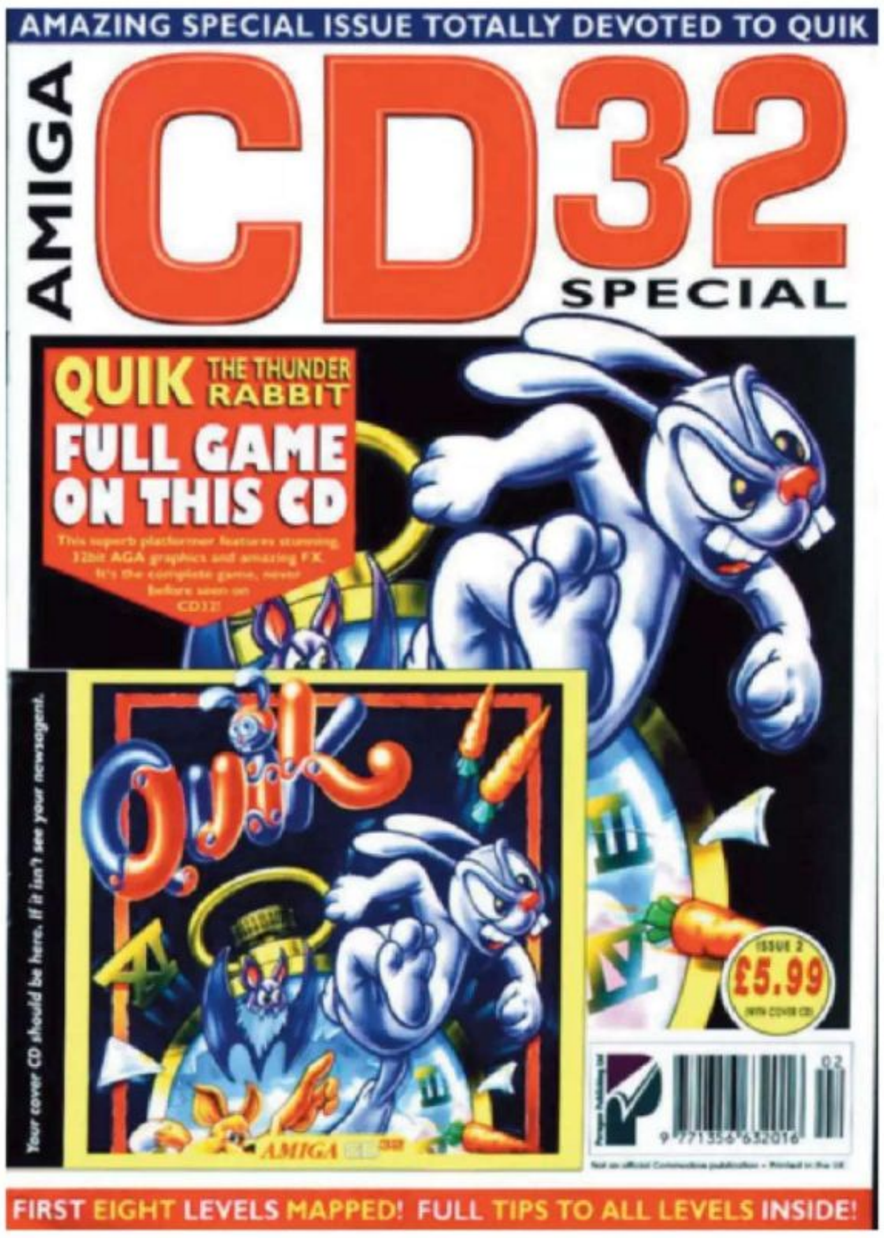
» The graphically impressive *Bump 'N' Burn* made good use of CD32's Akiko chip.

while the machine itself also benefited from improved aesthetics. Jettisoning the confusing "set top box" look of the CDTV, Commodore designed the CD32 to look a lot more like a traditional games console so that consumers knew that the machine was a pure gaming device before they'd switched it on. Close comparison, in fact, reveals several visual similarities to Sega's Mega Drive – almost certainly a deliberate move to proudly show off the fact that the CD32 had twice as many "bits" as Sega's hardware. The console look was topped off with a custom control pad, made specifically for the CD32. In retrospect, the controller is one of the worst ever designed as its D-pad was easily broken after extended play; however, at the time, good controllers were judged by how many buttons they had and with six action buttons to its name, the CD32 pad did not disappoint. Finally, the CD-ROM medium had now been around for a few more years, giving consumers, developers and publishers the opportunity to get to grips with the format's strengths and weaknesses whilst, fortunately for Commodore, the technology had not reached the point where software could easily be pirated.

As for the internal architecture itself, the CD32 was almost exactly the same as an Amiga 1200 except with the keyboard removed and the floppy drive replaced with a CD-ROM drive. A less obvious addition, however, was the addition of the Akiko chip to the 1200's custom chipset. To this day, the full capabilities of Akiko remain a mystery to all but the most tech-savvy, but we do know that its main purpose was to perform "Chunky to Planar" conversions on the hardware rather than waste valuable processor time. In plain English this means that 3D games would run much quicker on the CD32 than they would on an unexpanded A1200 and with several *Doom* clones just around the corner this would prove to be a usefully pre-emptive addition.

The CD-ROM drive itself, was designed to transfer data from disc at 300k per second, an abysmally slow speed by today's standards, but twice as fast as earlier CD-based hardware like the Fujitsu FM Towns and Commodore's own CDTV. More importantly, of course, the medium was much faster than floppy disks and would eliminate the pesky problem of disk-swapping that plagued fans of adventure games, which often took up more than ten floppies. The loss of a writeable format was countered with the inclusion of internal flash memory, which could be used to save game data, much as Sega's Saturn would the following year.

Externally the CD32 seemed like any other simple games console, but there were hidden depths. As well as the usual ports and sockets associated with such hardware, the CD32 featured an S-Video socket for improved picture quality that far exceeded the standard RF output of both the SNES and Mega Drive, whilst the two nine-pin joypad ports allowed any Amiga compatible controller to be plugged into the machine, meaning that mouse-driven games like *Cannon Fodder* and *Sim City* could be played just as they were meant to. Best of all, however, the back of the console featured a full expansion bay, which allowed for the attachment of an FMV module to play Video CDs (and even some of the Phillips CDi's videos) and, much more excitingly, the bay could be used in conjunction with a planned expansion card that would turn the CD32 into a fully functioning A1200, complete with disk drive ports, printer ports, extra RAM, faster processors and even a hard drive. An auxiliary port allowed for an Amiga 4000 keyboard to be plugged in, thus completing the CD32's potential to function as an Amiga computer.


AMAZING SPECIAL ISSUE TOTALLY DEVOTED TO QUIK
AMIGA
CD32
SPECIAL
QUIK THE THUNDER RABBIT
FULL GAME ON THIS CD
This superb platformer features stunning 32bit AGA graphics and amazing FX. It's the complete game, never before seen on CD32!
Your cover CD should be here. If it isn't see your newsagent.
ISSUE 2
£5.99
FIRST EIGHT LEVELS MAPPED! FULL TIPS TO ALL LEVELS INSIDE!

» Special issues of CD32 Gamer came with an entire free game.

» An early CD32 ad, designed to attract potential Mega Drive buyers.

» *Simon The Sorcerer*: one of the best reasons to buy a CD32.

» The most successful CD32 magazine lasted 21 issues, each of which came with a disc of demos and shareware.

» The first CD32 bundle came with the lacklustre *Microcosm*, among others.

» Another CD32 bundle that failed to pack in any killer apps.

» With games like *Cannon Fodder* and *Chaos Engine* this bundle was great but came a little too late to help.

In September 1993, the CD32 launched. As had become tradition with Amiga hardware, the console had limited appeal in its home country of America, but received a much warmer reception in Europe, most notably in Germany and the UK, where Commodore UK supported the console with a fierce marketing campaign. In the time-honoured Commodore tradition, a celebrity was roped in to endorse the console with "popular" TV presenter Chris Evans lending his visage to CD32 promos, just as William Shatner had endorsed the Vic 20 over a decade earlier. More aggressively, however, Commodore UK went straight for the throat of the Japanese console giants. A huge billboard advertisement was erected just outside Sega's UK headquarters and read "To be this good would take Sega ages", whilst Commodore UK's boss, David Pleasance, took every opportunity to remind consumers that to buy into the CD32's nearest rival, the Mega CD, required them to buy a Mega Drive for it to work and would therefore cost far in excess of the CD32's price tag.

Somehow, Commodore UK's brutal tactics worked… to a degree. Though the CD32 did little to dent the armour of the SNES and Mega Drive, it was a relative success in the booming CD arena. Conventional wisdom dictates that the CD32 was a complete failure, but the truth is that in 1993, sales of CD32 software far exceeded those of any other CD-ROM medium, including the Mega CD and even PC-CD. Why? Well, price was an important factor. Mega CD games cost between £40 and £50 each, whilst PC-CD ROM games were much more expensive, reaching as high as £70 in the case of Virgin's *The 7th Guest*. CD32 titles on the other hand compared favourably with their floppy counterparts. The most expensive games were released at only £29.99 while some came in much lower or added value by compiling more than one game onto a disc and even adding playable demos, as was the case with Team 17's hugely popular double packs.

THE CD32 WAS BOMBARDED WITH PORTS OF REGULAR AMIGA GAMES, WHICH WAS BAD NEWS FOR EXISTING AMIGA OWNERS BUT FOR THE THOUSANDS OF PEOPLE WHOSE ONLY AMIGA WAS A CD32, IT WASN'T ALL BAD

But what of the games? Sadly the CD32 was initially bombarded with ports of regular Amiga games, which was undoubtedly bad news for existing Amiga owners – but for the thousands of people whose only Amiga was a CD32, it wasn't all bad. Sure, many of the games that were ported directly from the A500 failed to take advantage of the new hardware, but then with games as good as *Speedball 2* and *Superfrog*, there was little reason to complain.

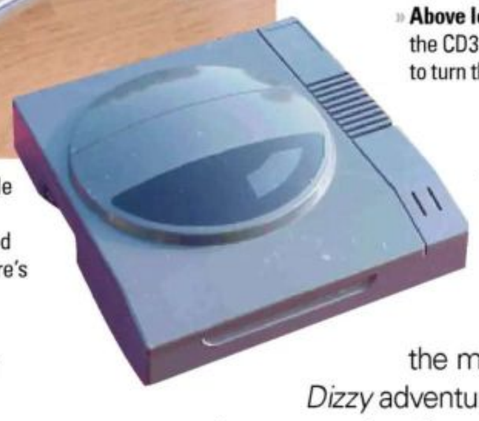
There were plenty of games that did take advantage of the CD32 though. Unfortunately, some were merely misdirected attempts to exploit the CD medium but, equally, there were original games that made the CD32 worth owning and even ports of existing Amiga games that used the new hardware to improve on the original.

Of those ports, nearly every game featured a CD-Audio soundtrack or animated intro, whilst a few others were boosted with extra levels, characters or something even better. Sadly, the launch software couldn't be counted amongst those that added anything new. The laughably poor *Oscar* was a terrible platform game, directly ported from the A1200, while the far more interesting *Diggers* was a good *Lemmings*-style puzzle game that, though very playable, hardly wowed prospective buyers. Aside from both games cohabiting the same CD, neither took advantage of the CD32's true potential. The first game to really do that came from Team 17 in the shape of *Ultimate Body Blows*. By combining characters from the original *Body Blows* and *Body Blows Galactic*, an epic roster of fighters was created that just would not have been possible on floppy disk. Several more expanded Amiga games soon followed: Team 17 struck again by releasing a double pack of *Alien Breed II* and *Alien Breed Tower*

Shareware Showdown

With the Amiga's massive shareware scene and the rise of Aminet, an Internet archive of free Amiga software, the CD32 was missing out on a wealth of brilliant games coded by enthusiastic Amiga hobbyists. It didn't take long for a few enterprising shareware distributors to begin producing CD32-compatible compilations, however. Early compilations like *Now That's What I Call Games* soon became available, whilst most Amiga magazines started to covermount CDs of the latest Public Domain games that would autorun on a CD32. Best of all the shareware compilations however, were undoubtedly *The Assassins* CDs: four compact discs jam-packed with many of the Amiga's best free games, presented through an expertly put together menu and at a reasonable price. Oddly enough, the four *Assassins* CDs are still available to buy, brand new, from their original manufacturer, who still operates through eBay. Track them down before it's too late.

AMIGA CD32



» **Above:** The FMV Module allowed Video CDs to be played, but was overpriced at £199. **Right:** Commodore's proposed CD1200 would have allowed the Amiga 1200 to play CD32 games, but was never released.

» **Above left:** These boards allowed developers to program games directly to the CD32 like a real Amiga. **Right:** The SX32 was one of a handful of devices to turn the CD32 into a full Amiga.

» This Amiga CD32 magazine lasted only two issues.

Assault, which was most notable for the specially filmed FMV intro that featured Team 17 staff spreading their Yorkshire accents deep into the far reaches of outer-space.

Codemasters took the easy route by using the massive storage space of the CD to bundle six *Dizzy* adventures together on a disk. Titled *The Big 6*, it was a cheap way of getting a title out, but the excellence of the *Dizzy* games made it an essential release. The CD32 version of *Worms* made more interesting use of the format: it allowed you to flip up the lid and pop in your own audio CDs, thereby allowing custom soundtracks eight years before the Xbox did.

Sound was, in fact, the one aspect of the CD medium that CD32 developers most made full use of; while most just included a musical score, some were daring enough to attempt CD speech. *Liberation* was one of the first; the voice acting wasn't great, but is fondly remembered for such classic (read: hideously embarrassing) lines as "Hey you, you wanna buy an animal? A real stuffed animal?". The aim was to create an immersive and realistic world, but was undone by the cheesy lines and soon became a parody of itself.

Adventure designers fared much better and, as history has proven, found that CD-speech and graphic adventures fitted together perfectly. Both arriving in 1994, *Beneath A Steel Sky* and *Simon The Sorcerer* broke new ground and shaped the way all adventure games are created today. Instead of having to read a line of dialogue that floated above the character's head, the speech would jump out of the TV set and into the gamer's world. When done well it brought added characterisation to everyone you met and allowed the listener to understand situations in a clearer way than was possible with text. Speech allowed characters to sound like they might be lying or to show if they sympathised with the main protagonist or even if they were a possible danger. *Beneath A Steel Sky* far outstripped its floppy counterpart with a full-speech track voiced by members of the Royal Shakespeare Company, whilst the opening sequence

» Commodore's cheeky CD32 ads went straight for Sega's throat.

» *Beneath A Steel Sky* reached new heights on CD32.

» *Flink* was a great CD32 platformer that also made it to the Mega CD.

featured a hand-drawn comic-style intro, exclusive to the CD. *Simon The Sorcerer*'s production quality was similarly high: comedian Chris Barrie voiced Simon to an excellent standard, dropping his trademark wit and cynicism into every remark. The supporting cast did their best to match Barrie's excellent performance and ensured that the end product stood the test of time. *Simon The Sorcerer* stands out to this very day for its voice acting as well as its devilish puzzles, humorous plot and outstanding hand-drawn backgrounds.

Another voice-fuelled adventure game did appear on the CD32 but was, disappointingly, only available in Germany. *Inherit The Earth* introduced the player to a future Earth where humans had become extinct, and animals roamed the land on two feet and worshipped the long-dead humans as gods. As you may have already guessed, the voice acting was all in German so it is difficult to tell if it was any good. A text-only, English version did appear on the Amiga and PC though and is well worth checking out.

As well as the aforementioned conversions there were some CD32 exclusives. First up was *Bump 'N' Burn*, a cutesy cartoon racer by Grandslam. Though it failed to better *Mario Kart*'s gameplay it did have a few graphical tricks up its sleeve that showed how the CD32 could have competed with the other consoles if it had been pushed properly. For a start the game ran in full-screen rather than the split-screen that *MK* players were used to. Secondly, it made great use of the Akiko chip to generate a track that climbed uphill, rolled down and banked at the corners. Finally, each race was preceded by a *Wacky Races* style introduction commentary in full CD audio.

Another CD-exclusive title that wowed Amiga owners was Psygnosis' *Misadventures Of Flink*. Most Amiga platform games paled in comparison to those on the SNES and Mega Drive, but *Flink* was refreshingly different. Graphically it soared well above the usual

» A shot from *Microcosm*'s expensive FMV intro.

» *Sixth Sense Investigations* was the last known CD32 game to be released in 1998.

» **Left:** A CD32 advert from one of Commodore's biggest markets. **Above:** The extra disc space allowed for an unprecendented number of characters in *Ultimate Body Blows*.

standard, with gorgeously colourful levels and screen-filling monsters; it used Akiko to generate sprite scaling and rotation effects and even had an unprecedented 60Hz mode!

There were certainly a few games that showed off the potential of commodore's latest machine, but there were still signs that some developers didn't yet understand where the true capabilities of the medium lied. Despite creating magic with *Flink*, Psygnosis was one such developer to misjudge the CD format so dramatically. With its first CD32 game, *Microcosm*, the developer created a 3D shooter that used 34% of the CD for music and 62% for pre-rendered graphics, leaving only 4% for the actual game, which some might say they forgot to add at all. Still, *Microcosm* was something of an oddity on the CD32, which had far fewer FMV-driven games than on other formats, like the Mega CD for example.

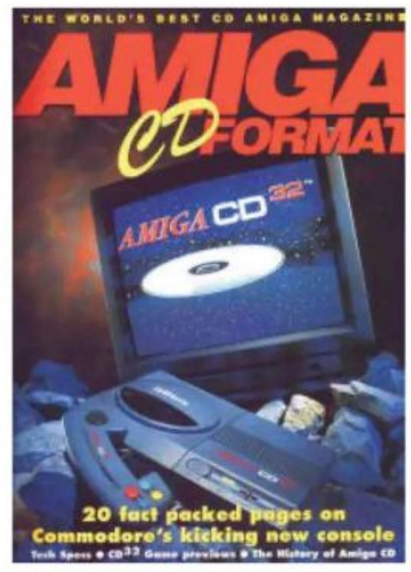
With its promising start, towards the end of 1993, it looked as if the CD32 might actually develop into Commodore's first decent console. After all, the ability to easily port Amiga software across meant that they had the support of the developers and the fair prices and general quality of the games meant that consumers favoured the console over its direct competitors; however, the CD32's future was already doomed. Commodore was falling apart at the seams, having milked profits dry and developed far too many hardware variations in a short space of time, and it was slowly becoming obvious to the public. Commodore Australia had already shut down, months earlier, and Commodore USA was next. Only seven months after the CD32's launch, Commodore's main office closed its doors for the last time. Commodore UK struggled on for a while, and even tried to buy the whole company at one point, but it was not to be. Commodore was dead and although the rights to both the Commodore name and the Amiga would be sold from company to company over the next three years, it became apparent that the brand would not return.

Developers continued to produce new CD32 games long after April 1994, however. No doubt encouraged by the Amiga's massive user base and the fact that third-party manufacturers had developed CD32 compatible CD-ROM drives for the A1200/A4000, the CD32 didn't truly find its best software until long after Commodore had perished. Great games like *Worms*, *Gloom* and *Alien Breed 3D* all made their CD32 debut in 1995 and beyond.

Even if Commodore hadn't passed on, however, it's doubtful that CD32 support would have lasted much longer than it did. By 1997, far superior consoles like the PlayStation and N64 were doing so much more than the CD32, essentially a product of the 2D era, could ever hope to achieve. There's no doubting that the console was a moderate success though and, had Commodore survived, it's possible that they would have built on that success to create the CD64 or CD128. Who knows where the Amiga CD might be today?

Yet, in many ways, the CD32 did live on. Amiga fans may have preferred the A1200 or A4000 back in '93, but with many having moved on to the PC (or Mac) since then, there's little room left on the desk for a second computer. It's the CD32, however, that retro Amiga lovers are increasingly turning to for their slice of Blitter-fuelled nostalgia. The compact design of the console and the speed and ease-of-use of the CD games make the CD32 the most convenient, hassle-free way to enjoy an old Amiga game. Sure, not all of the Amiga's games were ported across, but most of the best ones were and plenty were graced with enough significant improvements to make the console worthwhile. What's more, if you have an old Amiga game lying around, that wasn't available on CD, there are ways to get it to play (see boxout).

In short, the CD32 may not have been the best model of Amiga ever made, but it was certainly the most interesting and seemed to point the way for a possible bright future for the Amiga format before Commodore kicked the bucket and left us with what is essentially a more accessible Amiga 1200, with a couple of exclusive games, but one that's nowhere near as bad as some like to make out.



» A 6-page CD32 supplement given away free with Amiga Format in September 1993.

Unlocking the CD32's true potential

It is possible to add floppy disk drives, hard drives and a keyboard to the CD32 to turn the console into a fully-fledged Amiga computer. To do so requires an SX-1 or SX-32 expansion card, which are quite rare these days and very expensive. For those who want to play the floppy-based games, however, there is an easier way. For those who know exactly how, it is possible to copy the Amiga's floppy disks to a CD-ROM, add a CD32 boot-sequence and, just like that, the game will work on an unexpanded CD32. The more technically-minded are also able to store many floppy games on a single CD and load them from a menu. Please don't ask us how it's done though. Firstly, we don't know and secondly, it's a legally grey practice that, at the very least, requires you to own the original floppies.

Special thanks to www.amigahistory.co.uk for supplying all photographs.

ABC
Engineers, would like to welcome you to the world of Liberation. Happy hunting. . .
Game playing : - Mission 1
Now entering: Vesson Store,
4, Platzweg Gardens
A large room, filled with shelves that are stacked with all manner of household goods, foodstuffs and beverages. Towards the rear of the room stands a credit terminal behind which you can see a figure illuminated by the flickering light of the VDU.

» *Liberation* was the sequel to *Captive* and a very good CD32 RPG.

PERFECT TEN GAMES

We'd love to say that the CD32 was home to plenty of exclusive titles and not just 500 ports, but we'd be lying. Still, here's a selection of titles that you really shouldn't be without.
Screenshots courtesy of www.lemonamiga.com

01

02

03

04

DIGGERS

» **RELEASED:** 1993
» **PUBLISHED BY:** COMMODORE
» **CREATED BY:** MILLENNIUM INTERACTIVE
» **BY THE SAME DEVELOPER:** JAMES POND2: ROBOCOD, GLOBAL EFFECT, VITAL LIGHT

01 One of the bundled launch titles for the star-crossed console, *Diggers* followed the antics of four mining concerns on the planet Zarg as they competed, with the help of the user, to rob the world of its resources. *Diggers* hasn't aged well, as it clearly attempted to mimic the success other strategy/management games had seen on the Amiga. The joypad provided a frustrating interface experience, but fortunately Millenium had the foresight to allow mouse control. Clean, if uninspired, graphics and chirpy tunes made it an enjoyable title for the right gamer, but was probably a bad choice for a bundled game. It pissed on its accompanying launch title (*Oscar*) from a great height, mind you.

WORMS

» **RELEASED:** 1995
» **PUBLISHED BY:** OCEAN
» **CREATED BY:** TEAM 17
» **BY THE SAME DEVELOPER:** ALIEN BREED

02 *Worms* appears to have been released on practically every gaming platform known to man, so it should come as no surprise to learn that the CD32 received a version of its very own. It should also come as no surprise to learn that, like many other CD32 titles that have been mentioned on these two pages, *Worms* was pretty much identical to the original Amiga 500 version. Again though, it's a wonderful little title and the ability of the CD32's mouse meant that those pesky little annelids were just as easy to control on Amiga's console as they were on its home computer. Interestingly, a legal download of the CD32 version of *Worms* appears on the Dream17 website, so check it out at www.dream17.info/downloads.php?cat=2.

FLINK

» **RELEASED:** 1994
» **PUBLISHED BY:** PSYGNOSIS
» **CREATED BY:** PSYGNOSIS
» **BY THE SAME DEVELOPER:** BENEFACTOR, MICROCOSM, LEMMINGS

03 One of the few dedicated CD32 games, from 16-bit legend Psygnosis. Also known as *The Misadventures Of Flink*, this game made full, unabashed use of the monumental storage space available on these new-fangled CD ROMs and greatly beneffited from it. The back story is pretty standard stuff (a wizard's apprentice putting paid to some evil dude's nefarious antics), but what's fascinating is the impressive number of cross-genre elements seamlessly blended into the gameplay. RPG, beat-'em-up, shmup, puzzle and adventure all intertwine in this impressive demonstration of what the CD32 was really capable of. The whole thing gets kicked in the nads by a crippling lack of a save option, however. Damn shame about that. Yes sir.

BANSHEE

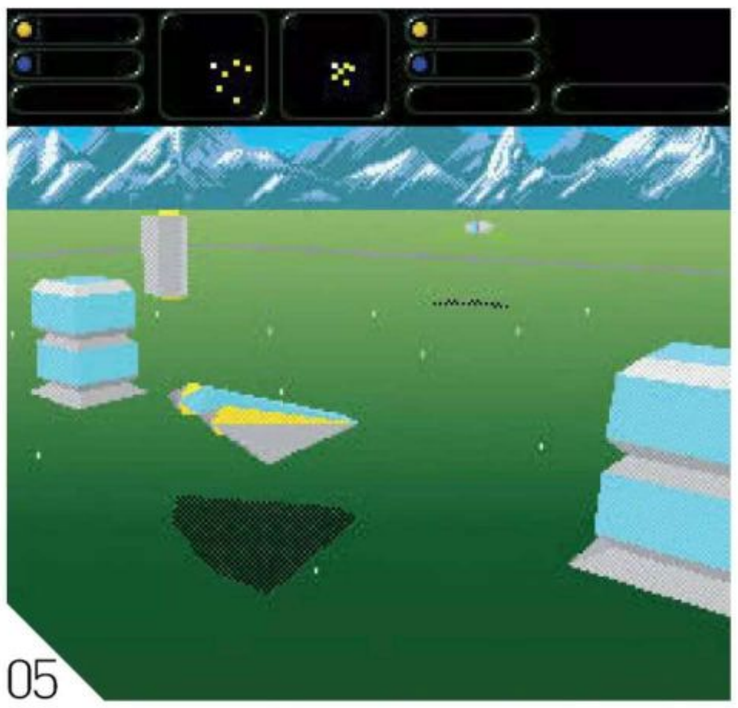
» **RELEASED:** 1994
» **PUBLISHED BY:** CORE DESIGN
» **CREATED BY:** CORE DESIGN
» **BY THE SAME DEVELOPER:** TOMB RAIDER

04 It's rare to find a decent shmup on the Amiga and even rarer to discover one on the CD32, so when you discover one as good as *Banshee* you're not going to let it out of your sight. Obviously based on Capcom's *1942* series, *Banshee* is a tough as nails shooter that will have you gnashing your teeth in frustration as you gaze dumbstruck at its stunningly crisp visuals and hectic onscreen action. It may not be the most original of concepts but it has been put together with such flair and obvious skill that it really doesn't matter in the slightest. Fortunately for CD32 owners, Banshee plays perfectly fine with the machine's joypad and Core Design even saw fit to include an extra two levels to fight through. Those with a fetish for tough blasters would do well to track this down straight away.

GUARDIAN

» **RELEASED:** 1994
» **PUBLISHED BY:** ACID SOFTWARE
» **CREATED BY:** ACID SOFTWARE
» **BY THE SAME DEVELOPER:** SUPER SKIDMARKS, ROADKILL

05 It wouldn't be at all unreasonable to classify this unimaginatively titled game as '*Starfox* for the Amiga generation'. A dynamic, playable and brightly coloured 3-D shmup that, for once, was actually better when using the CD32's nasty joypad thing. Many early 3-D fly-'em-ups descended into tedious simulations, rather than the zoom-around-blowing-stuff-up type games we really wanted, but *Guardian* shrewdly kept itself well within the "hit 'em hard, hit 'em fast" parameters. By keeping up the game speed and making the ship as controllable as possible, it elegantly camouflaged the somewhat limited gameplay and ticks all the right boxes for a proper console game, which, in retrospect, was exactly what the CD32 lacked and so desperately needed.



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BENEATH A STEEL SKY

» **RELEASED:** 1994
» **PUBLISHED BY:** VIRGIN INTERACTIVE
» **CREATED BY:** REVOLUTION SOFTWARE
» **BY THE SAME DEVELOPER:** BROKEN SWORD

06 Along with *The Secret of Monkey Island* and *Indiana Jones & The Fate Of Atlantis*, Revolution's *Beneath A Steel Sky* is quite possibly one of the greatest Amiga point-and-click adventures ever made. Like many CD32 ports, *BASS* didn't push the console in any way other than offering superior music and greatly reduced loading times, but in a way this didn't matter. It certainly took a while to get used to the CD32's rather clunky pad, but play this with a mouse and everything became much more enjoyable. *Beneath A Steel Sky* may be little more than a basic port, but it's a basic port of one of the Amiga's greatest adventures, and owners of the machine rightly lapped it up.

ALIEN BREED: TOWER ASSAULT

» **RELEASED:** 1994
» **PUBLISHED BY:** TEAM 17
» **CREATED BY:** TEAM 17
» **BY THE SAME DEVELOPER:** PROJECT X

07 Team 17 was well known for going above and beyond the call of duty when it came to porting games across to the CD32, and the superb *Tower Assault* was no exception. Featuring an extremely lengthy intro, beautifully drawn sprites, a new retreat move that enabled you to walk backwards while firing, and plenty of over-the-top blasting action, *Tower Assault* was yet another excellent blaster from Team 17 and was perfectly suited to the CD32. Vastly superior to the PC version that appeared at the same time, *Tower Assault* was a stunning shooter that deserves to be in every CD32 owner's collection. If that wasn't enough, it also came with an AGA enhanced version of *Alien Breed II: The Horror Continues*.

D/GENERATION

» **RELEASED:** 1993
» **PUBLISHED BY:** MINDSCAPE
» **CREATED BY:** ROBERT COOK
» **BY THE SAME DEVELOPER:** FURY OF THE FURRIES, THEME PARK, SYNDICATE

08 A prime example of why the CD32 ultimately failed to grab the attention of seasoned gamers. *D/Generation* was already a fairly well respected game, so using it to acclimatise Amiga-philes to the new machine wasn't a bad idea. In principle. The decent isometric run-and-gun gameplay – interspersed with puzzler elements as the player infiltrates a building infested with out-of-control bio weapons – made zero use of the console's capabilities. The massive storage space of the CD was totally ignored, the joypad control was as effective as a one-legged man in an arse-kicking contest and the sparse graphics left players wondering why they didn't just stick with their Amiga 500. It's still a damn good game though…

SIMON THE SORCERER

» **RELEASED:** 1994
» **PUBLISHED BY:** BLITTERSOFT
» **CREATED BY:** ADVENTURE SOFT
» **BY THE SAME DEVELOPER:** WAXWORKS

09 Like *Beneath A Steel Sky*, *Simon The Sorcerer* was another classic 500 title that greatly benefited from the CD32's storage capacity. While there were no improvements in Simon's visuals, the new soundtrack and superb voice recordings greatly enhanced *Simon The Sorcerer*'s atmosphere. Indeed, Chris Barrie's voiceover for Simon was a revelation and set high standards for other companies to follow. Sure, he had the deepest 12-year-old voice that you'd ever heard, but there was no denying that his acidic tongue perfectly suited Simon's many sarky one-liners. It may be little more than a port, but, with the greatly reduced loading times and superb voice acting, fans should snap it up straight away.

ZOOL

» **RELEASED:** 1993
» **PUBLISHED BY:** GREMLIN
» **CREATED BY:** IN-HOUSE
» **BY THE SAME DEVELOPER:** ACTUA SOCCER

10 *Zool*, is generally considered as one of the greatest Amiga platformers ever made – hardly surprising when it has no *Mario* or *Sonic* games – so it should come as no surprise to learn that the CD32 version was obviously the best incarnation of the bunch. Whilst a little too garish at times, *Zool*'s cinematic opening, frenetic soundtrack and console styled nature means it's perfectly suited to the CD32, and best of all there's a brand new massive world to explore. Whilst *Zool* was never in the same league as the aforementioned platforming superstars (you can kid yourself otherwise but you know it's not true), it had no equal on the Amiga, so why not treat yourself to the definitive version of the game? Go on. You know it makes perfect sense.

AMIGA CD32

and the rest...

Looking over the following two pages you're probably thinking that the CD32 was home to Amiga 500 and 1200 ports and very little else, and to be honest you'd mainly be right. That's not to say they weren't good games though

01 SKELETON KREW
02 GUARDIAN
03 CHAMBERS OF SHAOLIN
04 ULTIMATE BODY BLOWS
05 MORPH
06 FLINK
07 PREMIERE
08 FRONTIER: ELITE II
09 BRUTAL: PAWS OF FURY
10 POWER DRIVE
11 TROLLS
12 JAMES POND II: ROBOCOD
13 CANNON FODDER
14 THE LOST VIKINGS
15 SEEK & DESTROY
16 PIRATES! GOLD
17 FIELDS OF GLORY
18 THE CHAOS ENGINE
19 MEAN ARENAS
20 RISE OF THE ROBOTS
21 FURY OF THE FURRIES
22 CHUCK ROCK
23 SHADOW FIGHTER
24 UNIVERSE
25 BATTLE CHESS
26 FIRE & ICE
27 LIBERATION
28 ALFRED CHICKEN
29 THE LABYRINTH OF TIME
30 SOCCER KID
31 JUNGLE STRIKE
32 D-GENERATION
33 BEAVERS
34 PINBALL FANTASIES
35 STAR CRUSADER
36 NAUGHTY ONES
37 DIGGERS
38 BRUTAL SPORTS SERIES FOOTBALL
39 MARVIN'S MARVELLOUS ADVENTURE
40 GLOOM
41 VITAL LIGHT
42 EXILE
43 GUNSHIP 2000
44 RYDER CUP: JOHNNIE WALKER
45 BENEATH A STEEL SKY
46 LEGENDS
47 AKIRA
48 DEEP CORE
49 PINBALL ILLUSIONS
50 ARABIAN NIGHTS
51 LAMBORGHINI AMERICAN CHALLENGE
52 MICROCOSM
53 ROADKILL
54 LITIL DIVIL
55 AMIGA CD FOOTBALL
56 SLEEPWALKER
57 WEMBLEY INTERNATIONAL SOCCER
58 DARKSEED
59 ARCADE POOL
60 SIMON THE SORCERER
61 GLOBAL EFFECT
62 ATR: ALL TERRAIN RACING
63 IK+
64 UFO: ENEMY UNKNOWN
65 ALIEN BREED 3D
66 THE SEVEN GATES OF JAMBALA
67 QUIK THE THUNDER RABBIT
68 SENSIBLE SOCCER V1.1
69 WHALES VOYAGE
70 CASTLES II: SIEGE & CONQUEST
71 ZOOL 2
72 MYTH: HISTORY IN THE MAKING
73 FEARS
74 TOP GEAR 2
75 DANGEROUS STREETS
76 SPEEDBALL 2: BRUTAL DELUXE
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These leather bound books remind me of my book collection still in storage. That's kind of unsettling. My head is killing me!
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THIS GAME
HAS WORKED
40 DAYS
WITHOUT AN
ACCIDENT

EXIT

Ultimate Guide Lemmings

When a game disavows responsibility for loss of your sanity, hair or sleep, it's easy to dismiss it as hyperbole – but for Lemmings, it was closer to an understatement. Nick Thorpe looks back on DMA Designs' critter-saving classic

If you ever imitated another child's bad behaviour when you were young, you were almost certainly asked: "if your friend jumped off a cliff, would you do that too?". Of course, if you were like us you'd claim that you would in order to remain logically consistent, an act of dishonesty which only further frustrated the adult and saw us frogmarched to the nearest cliff. But if you were a lemming, that statement wouldn't be a lie – those guys just love chucking themselves off objects. They also love wandering into jets of flame, drowning, and generally doing very un-clever things. Not real lemmings, mind – their suicidal urges are something of a misconception – but the critters found in DMA Designs' *Lemmings*.

The 'save-'em-up' premise behind the game plays into the popular misconception that lemmings are suicidal creatures. A large group of tiny lemmings will be released into the stage at varying intervals, and continue to walk aimlessly forward until they either hit an object and turn around, or are given a job by the player. Of course, most of the time this aimless wandering won't just get them nowhere near their goal, but will quite often lead them into all manner of horrible situations, be it plummeting off a cliff, walking into jets of flame, drowning or simply becoming trapped in a situation they can't escape. This is where the job roles come in – these allow the lemmings to forge a path towards the goal by smashing up the scenery, climbing ▶

Q&A MIKE DAILLY

R&D and level design, Amiga version

The walking animation for *Lemmings* was the product of a self-imposed restriction of 8x8 pixels. Do you think this particular approach is useful in aiding creativity?
Actually, it wasn't a self-imposed limitation, it was purely technical. In the old days, you always wanted to draw things using the power of two sizes (8, 16, 32, 64 and so on), so the next size down from 16x16 was 8x8. So it was to fit within 'standard' limitations that started all this – as was normal then. As it happened, only the width mattered on the Amiga, so the resulting size of 8x10 was fine as well.

What was the most difficult aspect of creating *Lemmings*?
There were a few issues. Making the lemmings walk and move exactly, binding feet to ground rather than sliding, actually getting collision working on a pixel basis was tricky – and in fact, *Lemmings* never worked totally for 'steel' things. On console it was a nightmare of the highest order. The five screen bitmap was utterly horrible, and I am still amazed they managed to port it to the Game Boy!

***Lemmings* is known for its difficulty. Did any of the levels keep you puzzled for ages?**
Nope. By the time we were churning out levels, we were all so good very at it, we could solve any level in seconds – pretty much. The only tricky bit was actually doing the level, but even then most would be solved in only a few attempts.

Which of your levels is your favourite and why?
It's Hero Time is my all time favourite, because it had a little bit of lateral thinking, and was far from obvious as to how you do it. Lots of people – including testers at Psygnosis – got utterly stumped on it, which makes me happy.

With the benefit of hindsight, is there anything about *Lemmings* that you would have done differently at all?
Tech-wise, *Lemmings 2* solved everything as far as console went, but game-wise… it would have been nice with a background.

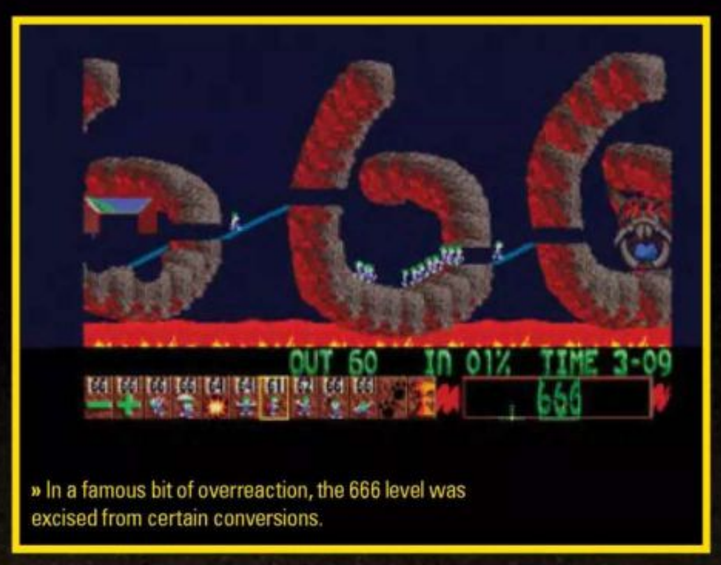
Have you ever had any memorable interactions with *Lemmings* fans?
We would occasionally get sent odd *Lemmings* items. Pillows, drawings – even wood carvings! I do meet some at shows, and that's always fun. What gets me most though, is the love of the game even after all this time. Seeing weird *Lemmings* 'things' happening – like the group that walked around a computer show one after the other dressed as lemmings – being Blockers and the like. That makes me smile!

▶ it, influencing the direction of other lemmings and surviving otherwise deadly situations. Each level has a set quota of idiotic lemmings that must be saved, as well as a stress-inducing time limit within which it must be done.

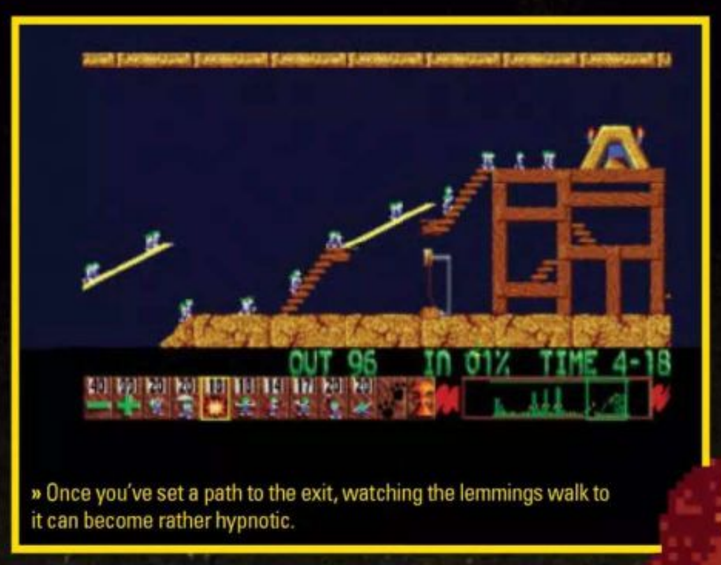
Despite the fact that *Lemmings* is a somewhat complex game, it provides an excellent example of a design principle that has fallen out of fashion over the years – education by level design. The early stages in the 'Fun' difficulty mode offer very simple puzzles that perfectly demonstrate the function of each job role as well as various objects within the game. While a short sentence might be given as a hint, the game doesn't hold the player's hand by any means. Even novice players can experience some degree of success, providing a crucial feel-good factor that hooks players on the game early. This also means that by the time players hit the stages where the challenge really begins to ramp up, they're well beyond the point of questioning how they should be playing, and only have to worry about finding a solution. While the difficulty curve isn't perfectly smooth, *Lemmings* does a great job of matching difficulty to player experience.

The genius of *Lemmings* is that while stage design provides some of the challenge, the rest is delivered by simply restricting the resources you're given to complete a challenge. A great example of this is found in the difference between an early level titled, Builders Will Help You Here, and the game's first truly challenging stage, Postcard From Lemmingland. The former stage gives you nothing but builders, and the solution to the stage is extremely obvious even to novice players. It's even possible to save every lemming, simply by having them build a stairway out of the pit that a few will inevitably tumble into. Postcard From Lemmingland provides exactly the same terrain, but drastically alters your options, ▶

» Early stages introduce players to the various jobs while providing little peril, which introduces a gentle difficulty curve.



» In a famous bit of overreaction, the 666 level was excised from certain conversions.



» Once you've set a path to the exit, watching the lemmings walk to it can become rather hypnotic.

CONVERSIONS

BEST — **WORST**

Covering every version would take a whole magazine, so we've picked the biggest hits and misses

COMMODORE 64

■ Despite utilising a multiload system, the Commodore 64 version of the game impressed many fans by flinging around up to 50 endangered lemmings, as well as including a massive 100 stages – surpassing the Spectrum and Amstrad versions, meaning this is the game to go for on an 8-bit computer.

GAME BOY COLOR

■ This should be an improvement over the surprisingly decent monochrome version, as it boasts the *Oh No! More Lemmings* levels and colour graphics. Unfortunately, it has major issues – poor scrolling being the primary complaint. However, the most unforgivable sin is the omission of the excellent original music.

PLAYSTATION 2

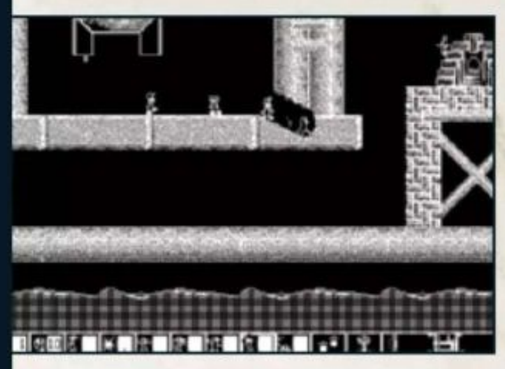
■ Based on Team 17's PSP version of the game, *Lemmings* for the PS2 is an updated version of the original game, with all 120 original stages plus 36 brand new ones. The star attraction is the EyeToy mode, which provides users with some surprisingly smart motion controlled stages to play.

NES

■ The NES struggles to provide a good game of *Lemmings*. 20 levels are missing and only a paltry 14 lemmings can be active at any one time. However, the real issue is the control scheme, which requires you to confusingly hold the B button to select skills rather than just selecting from the menu.

MEGA DRIVE

■ The Mega Drive version isn't the most accurate conversion, in part because of limitations on the width of levels, and it is missing some of the original Amiga stages. However, Sunsoft managed to make it up to Mega Drive owners with a number of exclusive stages, bringing the grand total up to a staggering 180.



MAC

■ In many respects, playing *Lemmings* on a Mac is a surprisingly good experience. The higher resolution graphics are particularly good. Unfortunately, some stages – notably Pea Soup, become almost impossible due to your inability to distinguish between objects and the dangers.

ATARI LYNX

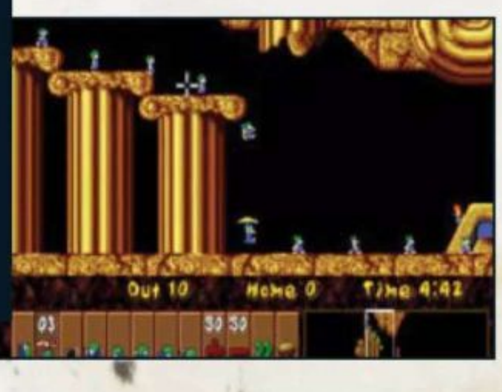
■ While some of the stage designs have had to be squashed vertically in order to fit the lower resolution, the Lynx conversion of *Lemmings* is one of the best, which should be expected as it was handled in-house at DMA Design. Of particular note is the ability to fast forward play, an appreciated inclusion.

AMIGA CD32

■ It's the Amiga version of *Lemmings* – but on CD! This sounds fantastic, but what does it mean in practice? Not a lot. Two-player mode is gone, and there are no enhancements for the new format. Now consider that this version arrived in 1994, well after the sequel, but still came out at full price...

MASTER SYSTEM

■ A stunning job was done with this 8-bit conversion. Pixel destruction made it into the game intact despite the constraints of the hardware. The game also contains 120 levels, though some have had to be simplified, as well as some new music alongside the original tunes we enjoyed so much.



PLAYSTATION

■ You'd expect that a machine as powerful as the PlayStation should be able to do a perfect version of *Lemmings*, right? Unfortunately, the PlayStation version of *Lemmings* and *Oh No! More Lemmings* is actually missing stages and doesn't use the original graphics. A missed opportunity.

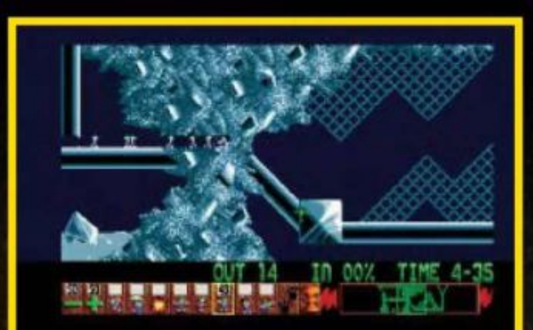
» Some traps such as flame jets initially appear as level decoration, before taking a more active role as hazards.

▶ providing only a single builder and a variety of other skills to get the job done. Suddenly, the stage becomes a lot more difficult and requires some very creative uses of skills to make it through – for example, you'll need to figure out how to turn a lemming around without any blockers.

If that sounds frustrating, you're not wrong – *Lemmings* is a game which is inherently frustrating, and as repeated attempts to clear tricky levels bear no fruit you may find yourself pulling your hair out. However, the game has a number of excellent features which bring down your stress levels. The first is the fact that the lemmings themselves are so cute. Being comprised of only a few pixels each, you wouldn't expect them to have a great deal of personality, but the animation really draws you into their plight as you watch a lone lemming bravely climb a tall object or mine a path for the others. The simple act of watching so many of them at once can in fact be rather mesmerising, as they travel the undulating terrain.

Then, of course, there's the music. Originally composed by Brian Johnston, a number of replacement tracks were added by Tim Wright at the request of Psygnosis, which had become worried about music copyright. The result is that the game uses many popular public domain songs, including classical compositions and staples such as *London Bridge Is Falling Down*.

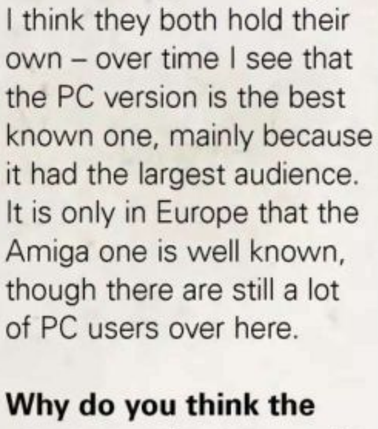
» In most versions, you can quit without nuking – but that doesn't carry the same satisfaction.



» Complex designs posed problems for coders when converting *Lemmings* to other systems.

Q&A RUSSELL KAY

Programming, PC version



How did you end up working on the PC port of *Lemmings*?
Well Dave Jones and I were working on Spectrum games together before he started DMA Design and bought his Amiga, so I graduated from the Spectrum to the PC (the processors are similar) and did PC ports for DMA, so it became my machine. When *Lemmings* came around, I did the original demo on the PC but I had my finals at University to do before I could give the game my full attention, so Dave started the game and I returned (having finished my finals) and got going on the PC port.

What technical challenges did you face?
Well there were a few: a lack of PC hardware support, the Amiga had a Blitter, I had a poor CPU; the lack of colours, initially we were doing EGA only, though we eventually did a VGA version; there was a shortage of memory, you could only reliably get around 512KB of main RAM on a PC back then; the was also a myriad of PC types out there, with varying RAM, graphics capabilities and disk sizes. We were essentially doing four different versions (EGA/VGA, CGA and Tandy), and having to cope with a lack of two mice, for the much lamented lack of two player mode, I'm still sore about that one…

We shared a lot of code back and forth with me doing some of the skill types (Walker, Climber that sort of thing) and the basic structure of the code is the same, I had to do a lot more with the various components that the PC had, with an attempt at interrupts to get a reliable raster split – I really wish I had not done that…

How do you feel it compares to the Amiga version?
I am very pleased with it, it holds up really well over time and it worked very well for PCs of that era.

What's the best version of *Lemmings* and why?
I think they both hold their own – over time I see that the PC version is the best known one, mainly because it had the largest audience. It is only in Europe that the Amiga one is well known, though there are still a lot of PC users over here.

Why do you think the game remains so popular with gamers?
Simplicity – the gameplay is easy to get, it is simple to pick up and the game itself has a good learning curve (we worked hard at that), so it is easy to get into…

Finally, we'd like to hear an anecdote of your time working on *Lemmings*.
At the time when we were looking for a publisher everyone we showed it to loved it, but thought it was too much of a risk to publish it. Even Psygnosis did initially, it was only later that Dave managed to persuade Ian Hetherington that it was worth the risk!

Not only was the result catchy, but weirdly effective in reducing stress – after all, it's hard to stay mad at a game which is playing *How Much Is That Doggy In The Window*. The sound effects also added to the cuteness of the lemmings, as they had high-pitched voices which would play at the beginning of each stage ("let's go!") and when you needed to make them explode ("oh no!").

Sorry, did we say 'needed' to make them explode? That might have been a tad disingenuous, because while it's certainly true that you'll need to use the occasional bomber to blast through some of the game's 120 levels, most of the time exploding lemmings were simply the result of player frustration. When a stage is lost, or you have a few blockers that need disposing of, or even when you just feel like it, the nuke button is your best friend. A double-click on it will activate a five second countdown for every lemming on the screen and result in a screen full of violently shaking critters, followed by a round of explosions that would please even Michael Bay. While this has become the default option for quitting a stage, the truth is that most versions of *Lemmings* actually have a non-nuclear option to quit the stage – they're just almost never used because nuking is far more fun.

Speaking of rarely-used options, one of the best features of the Amiga original was the two-player mode of *Lemmings*. This took place across 20 specially designed stages and saw players competing to rescue the most lemmings. While you could only assign jobs to your own lemmings, the competitiveness of the two-player mode arose from the fact that you could direct your opponent's lemmings into your own base, effectively stealing them. It's a fantastic design but it was often difficult to replicate on other systems, and is usually the first aspect of *Lemmings* to be scrapped during porting.

» Often, your main problems is keeping the other lemmings safe while letting the useful ones do their jobs.

Q&A TIM WRIGHT

Music, Amiga version

How did you originally go about composing the music for *Lemmings*?
Firstly, I had the basic premise of adapting well-known hummable folk tunes, to replace existing tracks that were problematic in terms of copyright, like the theme from *Batman* for instance.

Secondly, I was a dab hand at Karsten Obarski's Soundtracker and the follow-up called NoiseTracker, but I was told to write the music in a supplied tracker program – Linel's Sound FX if I recall correctly.

Thirdly, there were tight restrictions in terms of memory, permitted musical effects within the editor (i.e. none) and only three channels so that there was always one channel free for sound effects.

Brian Johnston had composed all of the music at that point, but they'd removed several of them for legal reasons. Some of his tunes remained, and they're also well remembered… like *Ten Green Bottles*, *The Can-Can Theme*, *How Much Is That Doggie In The Window?*, and his original tunes too.

The memory constraint meant that there wasn't much room to have samples per track, so there was a bit of instrument sharing. However, this eased up a bit towards the end and I was asked to create cover versions of well known Psygnosis music to be included within the game – tracks from games like *Menace* and *Shadow Of The Beast* – tricky stuff when you've only got three channels and a lot less memory than the originals.

I kinda chose which classic songs to cover at random… whatever popped into my head really; old folk melodies, Christmas hymns and so on. There were some original compositions in there too, just to spice things up a little, along with some mash-ups where I'd blend two tracks, or adapt known themes with my own melodies.

How long did it take and what problems (if any) did you encounter along the way?
I recall it took around a week or so, as there was a pressing deadline. But then I got a few more days to create the Psygnosis game cover versions I mentioned earlier. I didn't really encounter any problems during the composition phase, aside from trying to get the most out of the samples I shoehorned in to the available memory. There are well known tricks you can use with the likes of NoiseTracker, but none of that was allowed... I could only trigger notes, so it was hard work in that respect.

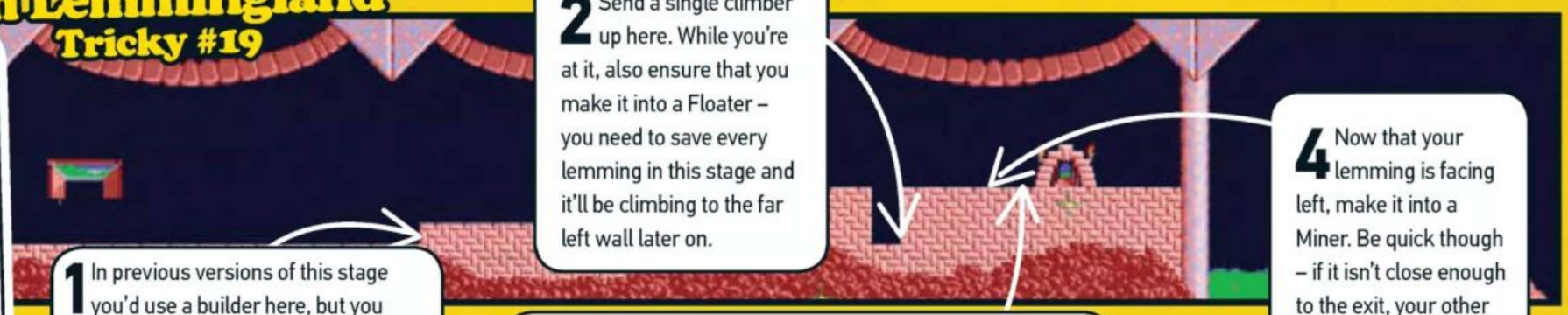
Were you involved with the sound effects of the game and who supplied those voices?
I was brought in towards the end of the project, so the sound effects were all done and dusted at that point. I believe the original *Lemmings* were voiced by Scott Johnston's mother, and then played back at a much faster speed to give them that classic chipmunk sound.

Why were there so many remixes of classic tunes?
I think Psygnosis were quite keen on the idea that the tunes were rip-offs from TV shows, and other well known folk or public domain tracks. But they didn't want any nightmares in terms of copyright and law suits, so I suggested we just stick to well known music that was out of copyright. So there were some riffs taken from folk tunes, classical music, religious hymns and so on.

TRICKY TERRAIN

These are some of the most infamously difficult levels Lemmings has to offer, alongside some helpful tips

Postcard From Lemmingland
Tricky #19



RESOURCES

x0	x1
x0	x1
0	x1
0	x1

1 In previous versions of this stage you'd use a builder here, but you only have access to one now. Use your Basher instead, to clear a path to the pit for all of your lemmings.

2 Send a single climber up here. While you're at it, also ensure that you make it into a Floater – you need to save every lemming in this stage and it'll be climbing to the far left wall later on.

3 This is the trick of the stage. Use your Digger straight away before the exit, and then assign it as a builder immediately. It'll reach the side of the small hole it just dug and turn around.

4 Now that your lemming is facing left, make it into a Miner. Be quick though – if it isn't close enough to the exit, your other lemmings won't be able to reach the tunnel to freedom.

Triple Trouble
Taxing #26

1 With your first lemming, dig a hole slightly to the right of where it landed – this will ensure you save the ones at the top without any undue worries.

2 Start a Builder off in this corner, and keep it in action until it reaches the stone circle. To protect your other lemmings, dig a hole beneath where the new lemmings are falling in.

3 Once your Builder has reached the stone circle, have him bash his way through it and create a path to the exit.

4 Use a Builder to repair the hole you dug earlier, completing the path. Now all you have to do is repeat this process on the other side!

RESOURCES

x0	x12
x0	x0
x0	x0
x0	x0

Down, Along, Up. In That Order
Mayhem #5

RESOURCES

x2	x5
x2	x1
x0	0
x0	x5

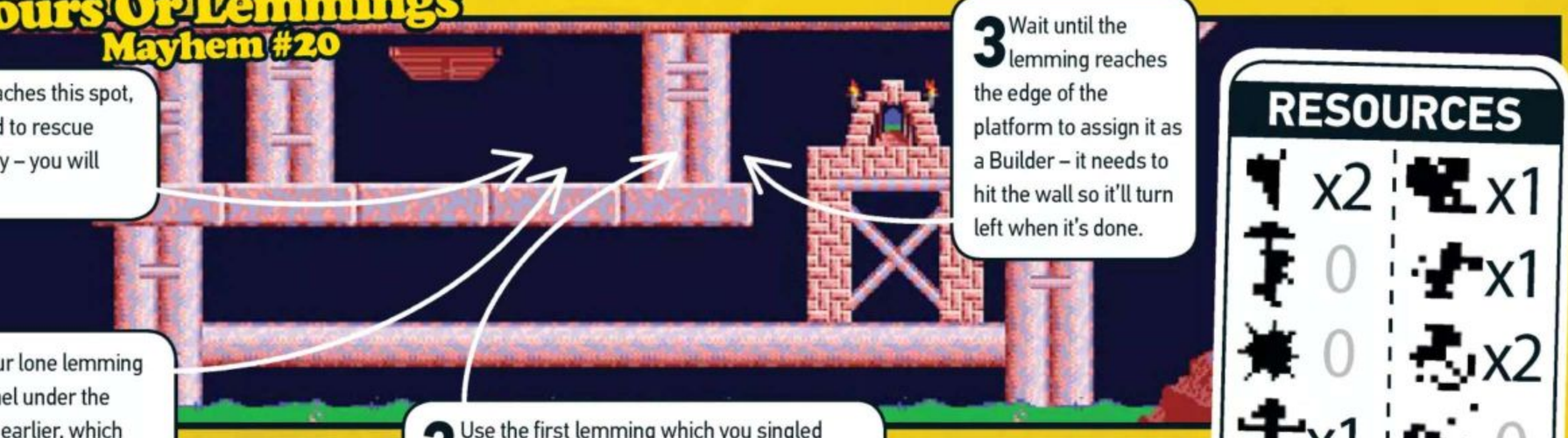
1 Send a climbing Floater over each side of this structure and block off the fire pits at each end of the level. To free the rest of the lemmings, dig at the left and right alternately.

2 You may wish to use a Blocker to keep a small group of lemmings aside here for visibility – ten should do. Have a Builder work its way up to this first ledge.

3 Create a Blocker to stop your lemmings from going over the edge, then start a builder towards hitting the Blocker. It'll turn around mid-build and keep on working!

4 Rinse and repeat, remembering to ensure that your Builder will hit your Blocker and turn around while continuing to build. Free any remaining lemmings by removing Blockers and finally, exhale!

No Added Colours Or Lemmings
Mayhem #20



1 Once your second lemming reaches this spot, assign it as a Blocker. You need to rescue all lemmings here, but don't worry – you will rescue this helpful chap later.

2 Use the first lemming which you singled out from the pack, bash through this wall to create a path towards the exit.

3 Wait until the lemming reaches the edge of the platform to assign it as a Builder – it needs to hit the wall so it'll turn left when it's done.

4 Finally, assign your lone lemming as a Miner to tunnel under the Blocker you assigned earlier, which will free it. Once it's done, make it into a Climber and you're golden!

RESOURCES

x2	x1
0	x1
0	x2
x1	0

Q&A DOMINIC WOOD

Programming, Master System and Game Gear

Had you played *Lemmings* before starting work on the conversion? If so, what did you think of the game?
I had played it (PC version I think) and I enjoyed the game, although I wasn't addicted. My friend's granny used to play it apparently! It's one of the first crossover casual games. When I was developing I didn't have time or the eye sight to play games in my spare time as I didn't have much. However when we had the contract we used to play it a *lot*.

What were the major challenges Probe faced in converting *Lemmings* to Master System/Game Gear?
Firstly, how to build a destructible/buildable landscape with a character based screen system with a limited number of characters, that was interesting. Secondly, how to get that mouse feel with a game controller. I spent a lot of time and effort on that, adjusting the acceleration/deceleration and coding immediate response with a change of direction, it was commended in the reviews. My aim was to beat the team working on the Game Boy version.

How much contact did Probe have with DMA/Psygnosis during the conversion process?
Not a lot from what I remember, I guess the original was coded by another external team, it would have been good to have hooked up with original dev team. But in those days, conversions were passed out and you certainly wouldn't be involved. Sega Japan sent a funny email on something we missed a day before production; it was completely true but would have meant a complete 100 level re-test so we didn't implement it.

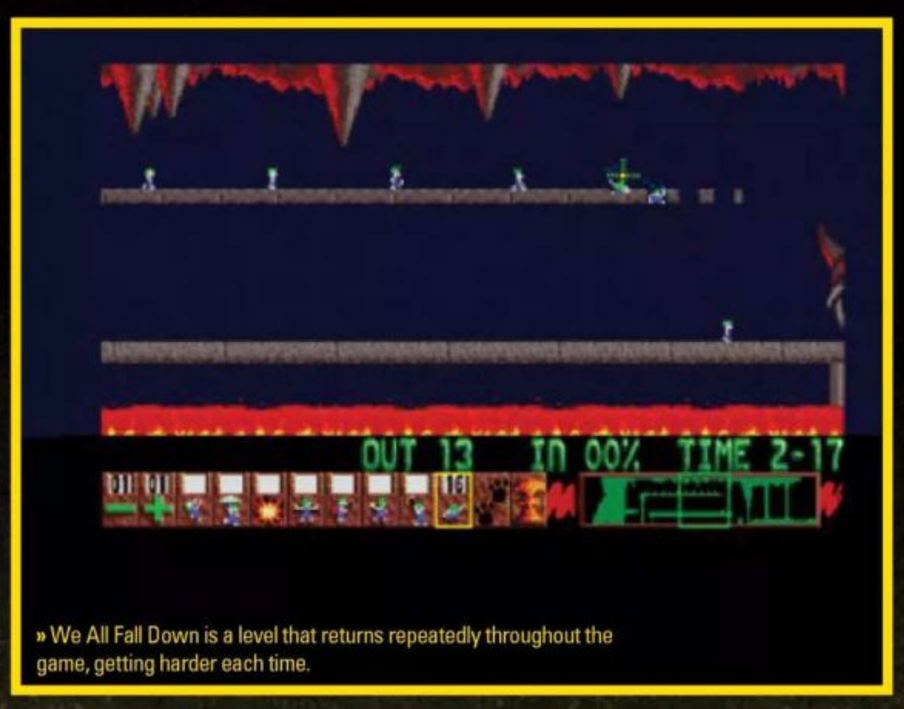
Why do you think the conversion went so well?
Great game! We had a good team with Neil Young (EA, ngMoco, N3twork) managing, although I don't remember him having to chase us that much. It was also the first game Rob O'Farrell worked on as test, he's a big cheese at EA UK now.

▶ The popularity of *Lemmings* during the early Nineties was enormous. The initial Amiga release was followed by conversions for what seemed like every format available, from the 8-bit computers and consoles to the rather more exotic likes of the CD-i, SAM Coupé and Sharp X68000, and even the new generation of consoles such as the 3DO. Despite the fact that we've singled out some versions of the game for praise and criticism later in this feature, it's worth noting that the core experience is so strong that you'll probably have fun with any you care to pick up. The popularity of the game was accompanied by massive critical success, with many reviewers recognising the clever puzzles and addictive qualities of the game.

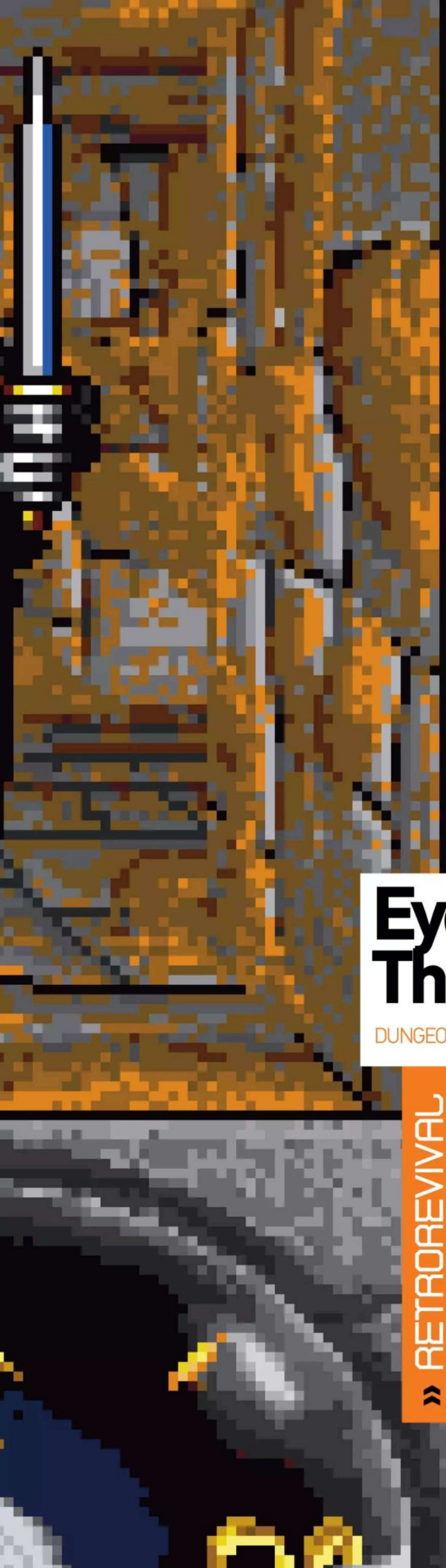
An expansion pack titled *Oh No! More Lemmings* soon followed, but was much less widely available than the original game, appearing on PC, Atari ST, SAM Coupé, Macintosh and Acorn Archimedes. The levels were also present in the Game Boy Color, PlayStation and Mega Drive versions of the game in varying number. Also of interest to *Lemmings* enthusiasts are the excellent Christmas *Lemmings* demos given away on magazines, which provided brand new winter-themed stages for players – a rather excellent Christmas present in itself.

"As well as the addictive, multitasking game play, ingenious use of physics and black humour we (the artists) loved how the DMA guys managed to cram so much character and fluid animation into an 8x8 pixel figure, it really brought the game to life. A lost art these days" Jeff Bramfitt, Psygnosis

Lemmings is still a unique game – even other save-'em-ups like *Chu Chu Rocket* resemble it only tangentially – and one which ranks alongside the likes of *Tetris* as one of the few games that can claim to have near-universal appeal. At a time when games were marketed almost exclusively to young males, *Lemmings* found popularity with all audiences. The cute characters were appealing in a way that was easy for anyone to understand, and the game gently eased players in, so even if you'd never played a videogame before you could probably get the hang of *Lemmings*. And once you were in, you were hooked – *Lemmings* is a strong game design which could keep players playing long into the night. In fact, we think we can hear an enthusiastic cry of "let's go!" right now – though that might just be our addiction kicking back in. Okay then, one more go... ✱



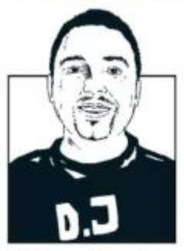
» We All Fall Down is a level that returns repeatedly throughout the game, getting harder each time.



Eye Of The Beholder 2: The Legend Of Darkmoon

DUNGEONS AND LOADINGS

RETROREVIVAL



» AMIGA
» WESTWOOD ASSOCIATES
» 1992

***Eye Of The Beholder* was a huge success for Westwood Associates, cleverly blending the 3D corridor-based exploring of *Dungeon Master* with the official *Dungeons & Dragons* licence.**

For its 1991 sequel (the Amiga port arrived a year after the DOS version) Westwood really pushed the boat out delivering an epic RPG that exceeded the original in every way. Running on an enhanced version of the original engine, *The Legend Of Darkmoon* allowed you to import your heroes from the original game and boasted greatly enhanced visuals and far better dungeon design.

Although it was once again set in a single location, the mysterious Darkmoon temple, the sequel featured outside locations and far better variety due to much of your adventure being set in the bowels of the corrupt temple and three large towers.

Improvements continued with better thought out puzzles, far more interesting enemies – although you'll initially find yourself dealing with a large number of different humans — and some truly devious puzzles. There's a solid range of interesting NPC, making *The Legend Of Darkmoon* a far more satisfying game to play than its excellent predecessor.

As with *Eye Of The Beholder*, the death of your characters would come often and quickly in *Darkmoon*, so making regular saves throughout your adventure was a must. We'd also recommend taking one proper healer down, or you'll be waiting forever before your party is fully healed. And grab some graph paper, you'll really need it.

One thing that's worth noting is that while the Amiga version is a very good port, it does pale in comparison to the DOS version, particularly the CD-ROM offering. Loads come quickly and often on the 16-bit machine, require annoying changes that do break the flow of the adventure a bit. I originally purchased a second floppy drive due to the excruciating loading times, and it sadly hasn't gotten any better with age. Stick with it though as this is arguably the best use of the *D&D* licence on a 16-bit system and easily the best *D&D* game of all time. At least until *Baldur's Gate* came along…

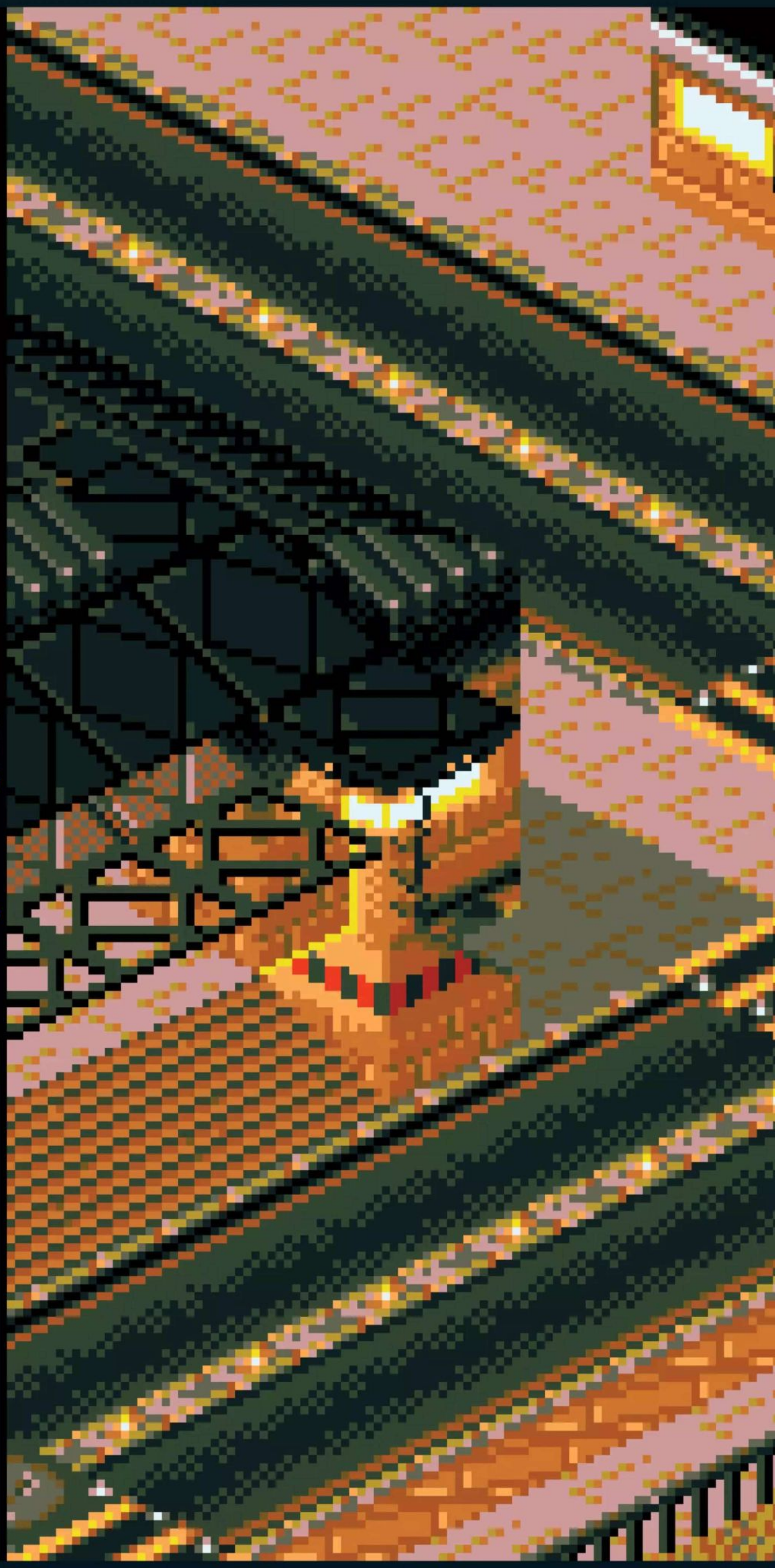
CLASSIC MOMENTS

Syndicate

» **PLATFORM:** AMIGA » **DEVELOPER:** BULLFROG PRODUCTIONS
» **RELEASED:** 1993

In other strategy games, you amass troops simply by producing them from a menu. *Syndicate* doesn't offer anything quite so boring – to get your footsoldiers, you need to be a little more active in your recruitment. By which we mean, you're going to have to walk around brainwashing civilians with the brilliantly-named Persuadertron. With this little device, no matter where you are you can quickly amass a sizeable fighting force, which will follow you through the streets obediently.

Of course, not everyone is so easily persuaded. The average civilian will tag along with you without much in the way of resistance, but if you want to get the likes of police officers you're going to have to have a sizeable following already. But get them you will, and eventually you'll be leading what looks like the world's most sinister conga line through the streets – often en route to the location of an influential scientist or police chief, who will quickly learn just how persuasive you can really be...



BIO

Syndicate provides a chilling and eerily plausible vision of the future, in which multinational corporations have grown to the point that they have supplanted national governments as the source of authority in the world. Of course, none of those corporations are too happy about the existence of other such entities, which is where you come in, along with your squad. In a series of real-time tactical missions, you'll achieve supremacy and unlimited profit potential for your own corporation. The game was a financial and critical success, so *Syndicate Wars* followed in 1996. *Syndicate*, a first-person shooter reboot, arrived in 2012.

MORE CLASSIC SYNDICATE MOMENTS

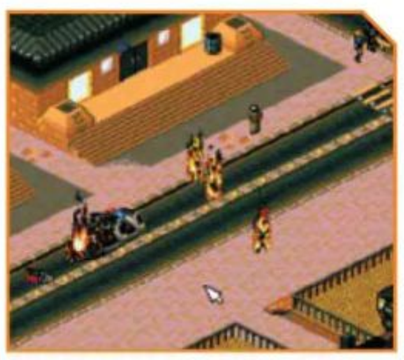
The first hit is free

If you have any moral objections to the acts you perform in videogames, it's probably best not to attempt *Syndicate*, as it's a game which requires no small degree of ruthlessness. As soon as you get to grips with the game's control scheme, you'll have committed your first murder – assassination is the fate of those who oppose your company.

Horribly wrong

Occasionally an audacious plan goes awry. You can't really help that, it's the nature of the game. What you can help is the gleeful little cackle you emit the first time you see your team emerge running and screaming from a recently-exploded vehicle. At the very least, it does offset the sting of having to make yet another trip to the cryo-chamber…

Dangerous depths



Sometimes, you're just fighting police when things get out of hand, or an encounter with enemy agents escalates quickly. At other times, you'll simply go our of your way to cause as much carnage as possible with tooled-up agents. Either way, you win – and the reward for your indiscriminate use of firearms is a screen strewn with fresh corpses.

World domination

From humble beginnings in Western Europe to eventual world conquest, it's a great feeling to see your colours slowly taking over the map as you establish a new corporate empire. As great as the main gameplay is, returning to the world map is a wonderful reminder of what you're working towards – and how close you are to achieving it.

THE MAKING OF...

Super Cars

The Amiga enabled increasingly dazzling games to be developed, but Super Cars went back to basics. Craig Grannell wrestles his journo car around a hairpin bend to catch up with the title's developer, Shaun Southern

If the history of gaming tells us anything, it's that classic formats never really die. A good example is the top-down racer, which has been popular since the days of Atari's pioneering *Gran Track* and *Sprint* series; and it battles on today, despite smartphones packing the kind of technology that would happily run, say, *OutRun 2* (if someone at Sega would authorise a conversion – hint, hint).

The same was true in the Amiga era. Just as some games creators were aiming to wow, with the likes of *Shadow Of The Beast*'s multiple layers of parallax scrolling and sampled pan-pipes, other Amiga developers were simply seeing the jump in technology as another means to create something that was a lot of fun to play. Enter Shaun Southern, fresh from working on 8-bit racing games, such as side-on arcade fare *Kikstart II* and abstract 3D head-to-head ball-roller *Trailblazer*.

What became *Super Cars* was to be a great deal more conventional than *Trailblazer*, and was largely inspired by Atari coin-op *Super Sprint*. For Shaun, it wasn't so much the game's visual appearance that grabbed hold (he believes *Super Cars* "looked a lot better" than Atari's effort), nor specific features – instead it was about the feel of the game: "In *Super Sprint*, there was that idea of perfect controls, and the feeling that you could always just about catch up, no matter where you were… Although I'm sure they let you drive faster when you were behind!"

Developed first on the Amiga, and then converted to the Atari ST, the main thrust behind *Super Cars* was therefore abstracting the emotions and sensations of racing, rather than any attempt at simulation. "From day one, I was interested in trying to make it always seem like you were in control,

» Lap one and Team **RG**'s off to a storming start, although that cafe does look tempting…

IN THE KNOW

» **PUBLISHER:** GREMLIN GRAPHICS

» **DEVELOPER:** MAGNETIC FIELDS

» **RELEASED:** 1990

» **PLATFORM:** AMIGA

» **GENRE:** TOP-DOWN RACER

but without all of the analogue input and feedback that you get when you're really driving," explains Shaun. "Both *Lotus* and *Super Cars* had 'digital' controls – or 'twitchy' as my mate Kel at work says – but even with the limitations of digital, I tried to make it so you'd feel like you were manoeuvring the car exactly where you wanted."

As the game progressed, it became key that players could learn quickly, and even if it wasn't at all realistic, you felt like you were in charge of your vehicle. This was, says Shaun, some pretty smart thinking in hindsight: "I tried many times to replicate *Sega Rally* cornering for our later rally games, but the more real-world you make this kind of thing, the more impossible it is to control. But in my Amiga racers, you could easily drift through gaps between cars – a bit like *Asteroids*! And even after being knocked into a wall in *Super Cars*, you could catch up pretty easily – mainly because there were no cars around to get in your way. The game therefore became sort of self-balancing."

Like most Magnetic Field releases, there was no extended development for *Super Cars*, and the entire product was turned around in about six months. Still, that didn't stop the small team wanting to go a bit beyond the likes of *Super Sprint* and add extra depth. "We wanted to make it more than just racing, hence introducing screens where you'd customise cars and buy new vehicles, even dealing with salesman," says Shaun. "Some of those might seem a bit cheesy, but they really added to the depth and playability, along with just taking your mind off of the main game for a bit."

Quite a lot of thinking went into the mechanics of this aspect of *Super Cars*. There had to be balance, to ensure players didn't just speed through the game, but also enough encouragement that they didn't feel frustrated. "Upgrading your car was the ultimate purchase, but very expensive – you needed to win a lot of races," says Shaun. "But fixing damage was usually worth it, otherwise you'd get left behind." The game also included 'haggling', rather than forcing a fixed price on a car you were trying to trade-in – something of a novelty for the time. "If I remember rightly, you'd always get a better price every time you haggled, but how much depended on how rude or nice you were," recalls Shaun, adding: "If you went over a certain 'limit of ▶

DEVELOPER HIGHLIGHTS

TRAILBLAZER
(PICTURED)
SYSTEM: C16
YEAR: 1986

KIKSTART II
SYSTEM: C64
YEAR: 1987

LOTUS ESPRIT TURBO CHALLENGE
SYSTEM: AMIGA
YEAR: 1990

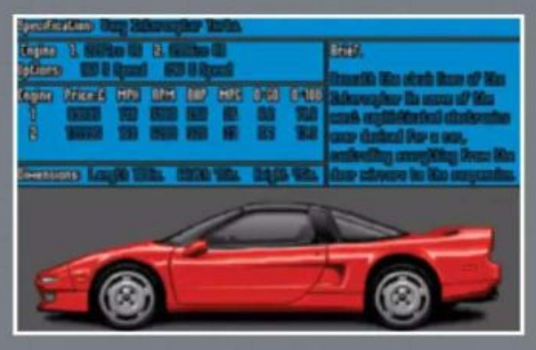
SUPER ARTIST

Shaun reflects on the talents of Andrew Morris

As was typical for a Magnetic Fields production, the graphics for the two *Super Cars* games were both created by Andrew Morris. Shaun recalls that Andrew drew everything by hand. "I'm not sure what tools he had in Deluxe Paint for copying bits around here and there, but I remember that he drew each rotation of all of the cars by eye too," he says, still clearly full of admiration for his ex co-conspirator.

Beyond the rugged and chunky *Super Cars* and its more refined sequel were some in-jokes, too, in the various scenes outside of racing action. "The commentary screens in *Super Cars* had commentators that were mostly based on people Andrew knew or knew of," says Shaun. "Some were flattering, and some... were not. Hmm... 'Ron and Nancy's news report'. I wonder who they were based on?!" Fortunately, some of the graphics were more complimentary, such as the shop sales girl and the car salesmen, whom Shaun remembers, respectively, were based on one of the team's sisters and a programmer that Magnetic Fields occasionally worked with at the time.

» Shaun Southern has created a fantastic array of games and was able to make the C16 sing.



» Shiny! Also: expensive. We can't afford this, as we're a little bit rubbish at winning.

» Brown muck all over the course. You'd think they'd clean things up a bit.

▶ abuse', you'd just get thrown out!" Mostly, though, this was a game about design, given that the technology was at the point where things that might have been tough on 8-bit machines were relatively trifling. "The Amiga had decent scrolling and the blitter, and so smooth movement was easy," says Shaun. "I think apart from playing around with the controls a fair bit, most of our time was taken up designing all of the courses."

In the end, nine tracks were created, and they all had a distinctly 'Lego road plate' feel, with plenty of 90-degree turns. They were also relatively short, which we imagined was probably intentional, to keep the game moving along at a fair lick. Shaun affirms the latter point, and explains that the regimented nature of *Super Cars* track design was in part down to technical limitations: "There were lots of 90-degree turns because we only had so many rotations for the cars, and once you were facing the right way, you would usually keep it like that until the next corner. I think we got a longer track as well that way because we made the most of the available space. Also, since the tracks were hand-drawn and not made up of tiles, there was only so much memory available for the track!"

AI was the final piece of the puzzle, determining the manner in which your opposition tackled the roads. We ask Shaun how the computer cars work, assuming they are all strictly moving along paths, follow-the-leader-style, but Shaun notes that even ostensibly simple movement patterns were quite complex to program: "The thing is, because the cars could be knocked off course, they had to know to steer away from the walls towards the centre of the track, and then they had to be told to turn before the corners." The solution was a map, on two levels – due to cars being able to go over and under bridges – stating which direction the cars should be facing in at any point. "With a fair bit of fiddling, this worked well, and made them seem almost sensible, without just driving perfectly."

Looking back, Shaun's pretty happy with how *Super Cars* turned out, and the positive reviews the game received. He also, given the chance, wouldn't change a great deal about the game: "We didn't know at the time we'd get to do a sequel, and so *Super Cars* was all about getting people interested. We did, of course, have plenty of unused ideas for another game, but fortunately we could afford to wait a while, because by that point we were programming the first release in the *Lotus* series."

A year later, after that dalliance with 3D racing, Magnetic Fields returned to *Super Cars*. This was also around the time *Micro Machines* arrived on the NES, but that title wouldn't make its way to the Amiga for a couple of years. On *Micro Machines*, Shaun reckons the Codemasters game was "totally different from *Super Cars* graphically, but because of this it had a lot more scope," but wryly notes that "it played very similarly and was every bit as good – without trying too hard…"

For *Super Cars 2*, motivation largely arrived from ideas that simply didn't make it into the first game, such as a two-player mode, although that involved a vertical screen-split, forcing players to memorise corners or spend quite a lot of time driving into walls. "There wasn't really an alternative," says Shaun, "because split the screen horizontally, like in *Lotus*, and you'd see pretty much nothing when moving vertically!"

There were plenty of other changes, too. "Many more courses – too many, really, because we were waiting for

SHAUN SOUTHERN: SIX OF THE BEST

Beyond Super Cars, Shaun has created some great titles for classic systems

TRAILBLAZER

■ Shaun modestly says "all I did was turn around *Metro-Cross*" when it comes to his lightning-fast two-player racer, but *Trailblazer*'s better than the game that inspired it. It's an addictive abstract space-age tussle, and we'd love to see a contemporary mobile remake.

POD

■ This one almost feels like an attempt to out-Minter Minter. The grid-based shooter borrows from *Caterpillar* and *Gridrunner*, with the twist that exploding enemies damage the grid, potentially hemming you in. Watch out for the eye-searing backgrounds on the C64 though.

KIKSTART II

■ The pinnacle of the *Kikstart* series, which by this point had actually spawned an oddball C16 survival game and a C128 semi-sequel. This release honed the controls, added a much needed on-screen speedometer, and gave you a construction kit – all for three quid.

COSMIC CAUSEWAY

■ *Trailblazer*'s underrated sequel has plenty going for it. Very much inspired by *Space Harrier*, the visuals are bolder and the courses are more complex. Power-ups and multiple pathways add depth to the title, but it retains the pace of its predecessor.

LOTUS ESPRIT TURBO CHALLENGE

■ Having tested the waters with *Super Cars*, *Lotus* was Shaun's first crack at something utilising the Amiga's technical clout. The resulting split-screen racer is thrilling and addictive, and still holds up well today.

LOTUS ESPRIT TURBO CHALLENGE 2

■ Closer to a straight arcade racer than its predecessor (and lacking a two-player mode), *Lotus 2* was influenced by *OutRun* and a desire to not "just do a rehash" of the original *Lotus*. Shaun considers this his best game.

» [Amiga] Yeah, this guy doesn't look dodgy AT ALL.

» [Amiga] Buy a car! Realise £30,000 doesn't get you very far!

» [Amiga] Front and rear missiles? That's... not very sporting.

Andrew to finish them all," says Shaun. "We also made the roads more windy and tight, along with adding obstacles such as gates and trains. Both *Super Cars* games were on the verge of being annoying at times, but when you got it right, it felt great." And then there were all the new trading components, which Shaun feels really added to the game: "Once you knew what a good price for each item was, you knew when to stock up and when to sell. Of course, prices fluctuated, so you'd sometimes be planning to sell or upgrade your car and find you couldn't. But when you made a killing, it felt really good!"

Perhaps the biggest shift from the original, though, was a greater emphasis on weapons. Although the first game had enabled you to hobble opponents via a missile, *Super Cars 2* ramped up your arsenal considerably, enabling you to kit out your vehicles with homing missiles, rotating 'super missiles', landmines and battering rams. "Well, with any sequel, you either do everything the same, or since you know people like the game, you push it a little bit," mulls Shaun on the impact of the extra weapons. "I think we weren't afraid to change things, and the new weapons were intended to give *Super Cars 2* an added dimension. I'm not sure how much we experimented with them, but the weapons certainly broke up play!"

Shaun does admit, though, that the updated firepower wasn't always a good thing and could instead cause problems for the players: "You'd sometimes have two players constantly trying to blow each-other up, rather than race. But in our games, you'd only both progress if one of you finished in a high enough position. A good bout of blowing each other up could see you both knocked out!" He adds that the landmines were particularly bad, since if someone dropped one right in front of you, you'd be unable to avoid it, but that also forced you to strategise, based around what your opponent had fitted.

» Two-player games: get your memory hat on, or you'll forever smack straight into walls.

Like its predecessor, *Super Cars* was broadly well received, but that was the end of the series, and Shaun doesn't remember if there were ever plans to do another: "I'm not sure what we might have put in a future version, but it never happened. By that point, we were working on a new *Lotus* game instead."

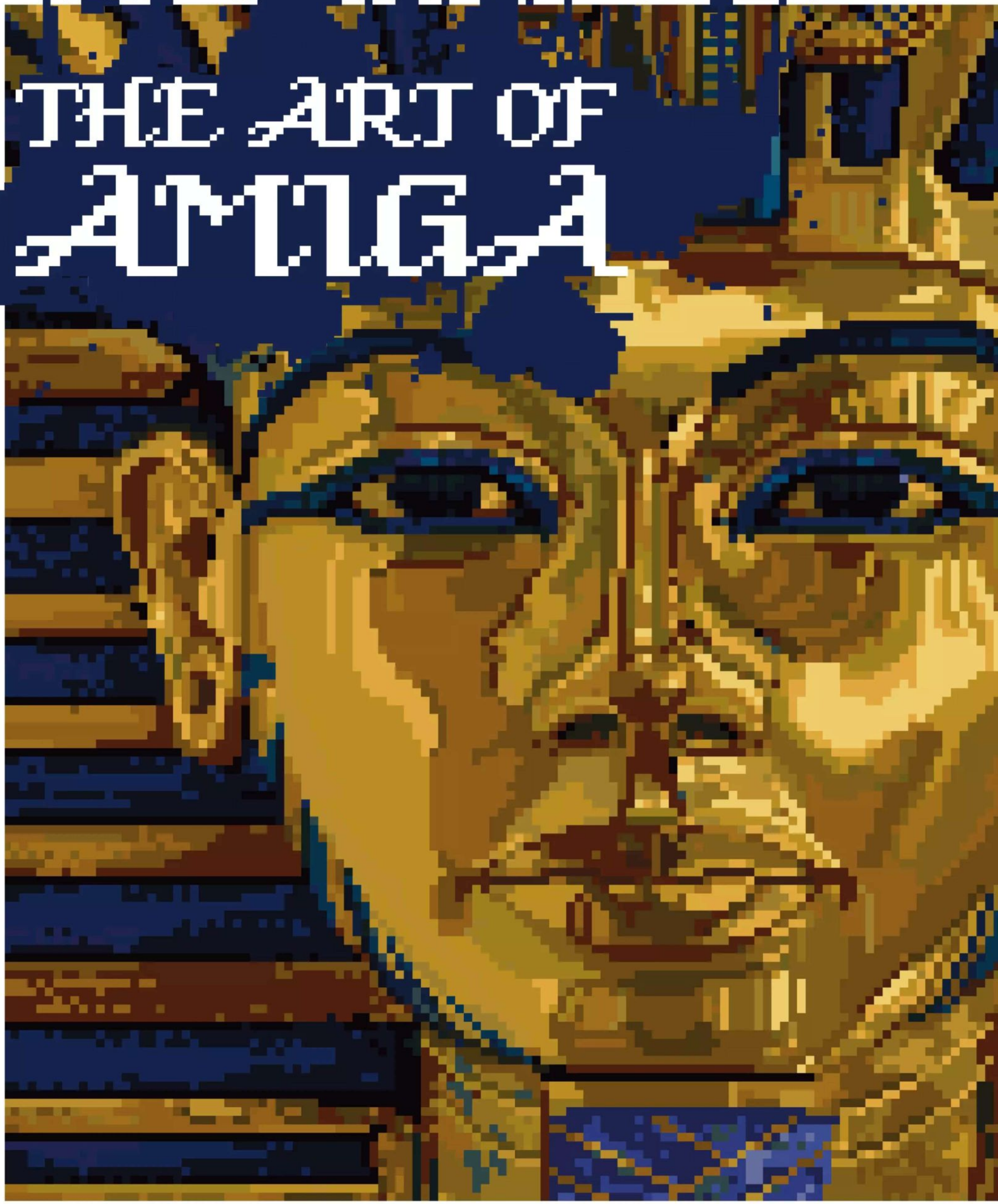
Shaun continued working on high-octane racers, notably well-received rally games. But if there's any intention of returning to his roots, he's not telling; instead, his latest creation riffs off of a newer craze: "A friend and I recently did an iPhone game – just a small, infuriating thing that you can check out via **eggbound.com**. We like to think it's the thinking-man's *Flappy Bird*... Maybe!" ✱

» Dear Health & Safety: Are you SURE you checked out this track fully?

» Buy! Sell! Admire the very beige desktop hardware!

» Missiles everywhere. Probably to be introduced to F1 any day now...

THE ART OF AMIGA

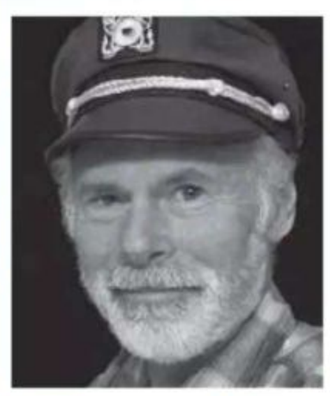


Meet the experts

Name: Simon Butler
Age: 54
Occupation: Game artist/designer
Website: None
Favourite own work: *Nine Lives*, the game sucked but I enjoyed doing the graphics
Favourite Amiga game: *Flashback*, *Another World* and *Speedball 2*
Favourite Amiga artist: Garvan Corbett

Name: Stoo Cambridge
Age: 41 and a bit (no, not that bit, this bit)
Occupation: Creative consultant
Website: www.hobeka.com
Favourite own work: *Blobbit*
Favourite Amiga game: *Cannon Fodder*
Favourite Amiga artist: Don't have one

Name: Andrew Morris
Age: 21-ish
Occupation: (Now) Property developer
Website: None
Favourite own work: *Kid Chaos*
Favourite Amiga game: *The Chaos Engine*
Favourite Amiga artist: Dan Malone



Name: Jim Sachs
Age: 62
Occupation: Software developer
Website: www.fish-byte.com
Favourite own work: *Defender Of The Crown II*
Favourite Amiga game: *Firepower*
Favourite Amiga artist: Brad Schenck

Name: Eric W Schwartz
Age: 39
Occupation: Freelance illustration and graphics
Website: http://www.sabrina-online.com
Favourite own work: My *Flip the Frog* cartoons, the 'Unsporting' *Aerotoon*, my recent musical Amiga tribute videos on YouTube
Favourite Amiga game: *Worms: The Director's Cut*
Favourite Amiga artist: Jim Sachs, among others

The Amiga set new standards for game graphics and computer art during its commercial lifetime, and has left a legacy of great artists. Andrew Fisher talks to some of the leading figures of the Amiga period

Did you have any formal training in art?
Simon Butler: None. I drew constantly from an early age but never saw it as a means to an end. There was a brief period when I considered doing comic art for a living.
Stoo Cambridge: No, I took a bit too long painting an exam picture which meant I got a 'U'. It didn't make much difference as I wanted to make games so exams were just a formality. I can recall studying *ZZAP! 64* quite a lot in Geography.
Andrew Morris: No, but I always enjoyed art as a child and in school.
Jim Sachs: No.
Eric Schwartz: I have a Bachelor of Fine Arts in illustration from the Columbus College of Art and Design.

How did you get started in computer art?
SB: I was called into Imagine Software by my best friend Steve Cain to help out on *Pedro's Garden*. I went back to college and then London to find a 'real' job, but I was called back to Liverpool to join the newly formed Denton Designs for a brief spell and then just found myself constantly working on games.
SC: Games on the VIC-20 made by a chap called Jeff Minter share the responsibility (or blame, some would say) of planting the idea into my head that I too could make games for a living. It wasn't until one Christmas when I received a C128 that my interest crossed over from thinking about it to doing it. After a few months of playing games I started to learn assembly language and played about with sprites and character sets, which then took me down the path of creating more graphics. I did have a game almost released which I'd hacked together using the *Shoot-'Em-Up Construction Kit* (*Battle Ball*) but alas, the publisher (Power House)

NUMBER CRUNCHING

5 the number of bit-planes a display is split into; a sixth bit-plane is used for the extra modes

8 hardware sprites with three colours and a transparent background colour; these can be 'paired' to give four 15-coloured sprites

32 number of colours in the standard screen mode

64 colours available in EHB (Extended Half-Brite) mode

84 pins on the upgraded Fat Agnus chip

200 height of the NTSC screen in pixels

256 height of the PAL screen in pixels

320 width of the standard screen

4096 total number of colours in the colour palette

2 MB Chip RAM on-board the Fatter Agnus

1280x512 maximum resolution of the AGA screen at 50Hz

16,777,216 total range of colours for the AGA machines

went under before it hit the shops. Fortunately they paid me the advance, which allowed me to buy the newly released Amiga 1000.

AM: I bought a ZX81 and progressed from there. When I was in school, I knew I wanted to design computer games and it came fairly naturally.

JS: I bought a Commodore 64 in the early Eighties, and started drawing on that. At first there were no drawing utilities, so I had to program the bytes directly. I would draw every pixel on graph paper, then laboriously type in the hexadecimal numbers into memory. When the Amiga came out, it revolutionised the process. Suddenly I had thousands of colours to work with, as well as tools.

ES: I have been drawing as long as I can remember, and have been interested in technology and computers nearly as long, so it was inevitable I would get into graphics. I wanted to use an Amiga ever since I saw the first magazine articles covering it in 1985.

> "I could put in intermediate pixels between two highly contrasting pixels to minimise the 'jaggies'. Later, I learned that there was a name for this – anti-aliasing"

What art utilities did you use on the Amiga – something commercial like *Deluxe Paint*, or specialised tools?

SB: *Deluxe Paint*. I found myself using a PC after a short stint but *DPaint* was still a fine piece of software even then. It took a long time for me to get pulled away onto other software simply because it was so good.

SC: I initially used *Deluxe Paint* which I pretty much stuck with until version three. It wasn't until I discovered a program called *Brilliance* that I switched. The main reason I switched was down to speed and functionality, which as a games artist is key, especially during deadlines and those last-minute updates that inevitably pop up five minutes before home time. For *Cannon Fodder* we used a custom tool for editing levels, which I recently discovered I still have the disc for. This tool let me import tiles, set up collisions and effectively gave anyone using it the means to create a game level. Back then most developers wrote their own tools for editing game stuff.

AM: *DPaint* – isn't that what everyone used? On some occasions we used bespoke utilities but *DPaint* was used for 99 per cent of what I did.

JS: *Graphicraft*, then *Deluxe Paint*, and then finally *Brilliance*.

ES: I used *Deluxe Paint* all the time back then for all sorts of things, along with software like *Disney Animation Studio* and *Moviesetter* for animation work. Later I used graphics software like *Personal Paint*, *Image FX*, and *Photogenics*, some of which are still comparable to the modern graphic software of today.

Did you work on the Atari ST as well, and what did you think of the rival machine?

SB: I did quite a bit on the ST, and must admit that even though it was the lesser machine, I had a soft spot for it. It seemed less 'convoluted', it was easier to use and although *Degas* (the art package) was by no means as powerful as *DPaint*, I was comfortable with it and did a lot of work I was very proud of. Amiga owners seemed to sneer at the Atari ST, so maybe it was just me sticking up for the underdog.

SC: Prior to my Sensible days I did a few games on both the Amiga and the ST. I would say I had a love/hate relationship with it. On one hand I thought it was undernourished graphically, I didn't like the limited 512 colour palette and much preferred the larger 4096 palette of the Amiga, but on the other hand it did work for the most part and was a lot simpler to code for.

AM: I did work on the ST – the game *Wrangler* (an update of our 8-bit game *Rollaround*) was designed for it and then ported to the Amiga. For some reason we did two separate versions of *Super Scramble Simulator* for the Amiga and ST. The Amiga was much better so we didn't really bother with the ST after that. I think we ported most of our Amiga games onto the ST, but they were very poor versions by comparison. We never compromised our Amiga games for the ST.

JS: I did some work porting graphics over to the ST. I found it very limiting.

ES: The ST was barely available at all in my area, so I had no first-hand experience with it.

Did the programmers/designers restrict what you could and could not do?

SC: At Sensible, no, we were all for innovation and I was quite involved technically with how some aspects of *Cannon Fodder* worked. I do think restrictions can help focus creativity as it goes some way in keeping things in check, otherwise you can go off on all sorts of tangents and lose sight of the end goal.

JS: Well, I was often the programmer/designer myself, but when working with other Amiga developers, I found them to be very open-minded and eager to try new things.

Which mode/palette did you prefer using, and were there any hardware tricks that helped you?

SC: Most of the games we did at Sensible were in 4bpp, which is a 16 colour-mode plus hardware sprites and the odd screen split when required. For example, on *Cannon Fodder* the parallax scrolling sequence shown before each mission

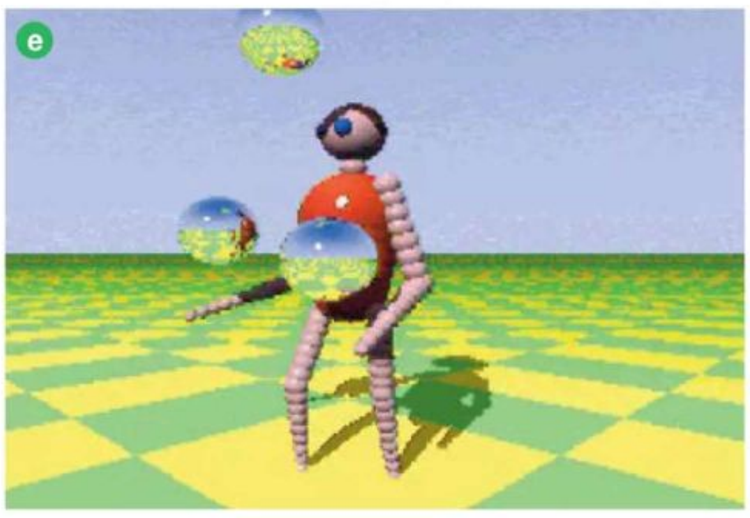
a The Psygnosis owl logo went through many revisions, but was usually the mark of a graphically excellent game.

b This outstanding Amiga 1200 image is by Polish demo-scene artist Lazur.

c In addition to some truly stunning in-game visuals, *Shadow Of The Beast* also boasts gorgeous looking cut-scenes.

VISUALLY SPEAKING

NewTek's Video Toaster was a combination of software and hardware allowing the generation of visual effects to match the quality of much more expensive systems. With up to four inputs and two outputs, the hardware acted as a 'genlock', synchronising the video signals to give a single picture. Its most obvious application was in laying graphics or text over a live TV signal. Many TV stations around the world used the Video Toaster for captions, menus and graphics. The most high profile programmes to use the system were submarine-based *seaQuest DSV* (all of the external shots of the craft were made with the Lightwave 3D software) and the entire first series of *Babylon 5*. NewTek remains in the hardware business, having won an Emmy for Technical Achievement in 1993 and moving to Windows-based hardware. James Cameron used the latest version of Lightwave for the hit movie *Avatar*.



was designed around the Amiga dual-play field mode. With the hardware we split the screen between each scrolling section, and swapped in a new palette and artwork which then gave us a new layer. The sky and the trees are one play-field and the mountains and foreground vegetation are another. I think there was about 40-50 colours used on those screens including the chopper, which was a 16-colour hardware sprite. The great thing about the Amiga was the hardware gave you the option to do tricks like that without loads of work, which for a designer is an open invitation to experiment.

AM: I think most games used the same mode – it allowed a decent amount of colours with a lower resolution, meaning the games would run quickly. I can't remember what that mode was called. I didn't expect the questions to be this geeky!

JS: Most of my Amiga graphics were in 320x200, 32-colour mode. I did a lot of experiments with colour-cycling, and made extensive use of it in my artwork. It was free animation, using no more bytes than those contained in the actual picture, yet could simulate glittering metal, moving water, and many other effects. When the Amiga 4000 came out, I did my last piece of Amiga artwork (Amiga Lagoon) in hi-res, 256-color mode.

ES: The 16 and 32 colour modes lent themselves to my more cartoony work, but I enjoyed experimenting with Hold And Modify modes and paint software, for different shading and transparency effects.

Did you have a particular style, and how long did it take to develop?

SB: My style is very cartoon-like, very bright and 'in-your-face', although if pushed it can vary quite extensively.

JS: My style was simply making things as realistic as possible. Since that's how I draw and paint anyway, it was just a matter of developing techniques to work around the resolution and palette limitations of the machines. This didn't take too long – a couple of weeks. I remember a conversation with Kellyn Beck when we were starting *Defender Of The Crown*. I was trying to explain how I could put in intermediate pixels between two highly contrasting pixels to minimise the 'jaggies'. A short time later I learned that there was already a name for this – anti-aliasing. Of course, now there are algorithms for it, but back then it was pixel-by-pixel.

SC: I think the style I have is as a direct result of wanting to retain a decent level of anti-aliasing which began when I was doing sprites and backgrounds on the C64.

AM: On the Amiga, the style I used changed to suite the game I was working on – *Lotus* is a very different looking game to *Kid Chaos*, for instance. I developed techniques such as anti-aliasing before they had a name but I was always learning new tricks with the tools that I had.

ES: There are variations and experiments, but mine is a cartoon style, inspired by the animated works that I grew up with. I like to believe that I'm still developing my style to this day, however slow that process takes.

> "The great thing was the hardware gave you the option to do tricks without loads of work, which for a designer is an open invitation to experiment"

What real word artists influenced your work?

SB: My graphical heroes existed in the comic world – Jack Kirby, Will Eisner, John Byrne, John Buscema, Moebius and many more.

SC: I like the old Seventies and Eighties airbursh art, especially some of the YES album covers created by Roger Dean. Geiger later inspired me, which you can see in the game I did called *The Executioner*.

JS: Norman Rockwell, N C Wyeth.

ES: I'm a fan of classic animation by Disney and the cartoon shorts directed by Chuck Jones. My *Flip The Frog* shorts were a tribute to that era.

How easy was it to animate graphics on the Amiga?

d Garvan Corbett's artwork featured in several Psygnosis games; this is from the intro to *Barbarian*.

e Eric Graham's Juggler animation showed the Amiga's ray tracing abilities, and Commodore acquired to rights to use it promotionally.

f Jim Sachs has created some truly gorgeous imagery for Commodore's Amiga. This hi-res piece called Amiga Lagoon is easily one of our favourites.

SB: You have to remember that none of us were professional animators and fewer still were trained artists. We were all just making this stuff up as we went along. It's not like today where kids come into the industry from animation schools with a TV show or movie on their CV. We were really flying by the seat of our pants and there was no one to ask for advice and very few decent books for reference. The machine itself was seldom the problem, it was almost always the topic.
JS: It was incredibly easy. As far as I know, it's never been matched. Using *Aegis Animator* or *Disney Animation Studio*, we could sit around and brainstorm a project while animating our ideas in real-time. I wouldn't have any idea how to do that with modern machines, short of a full-blown video production.
ES: The great paint and animation software made it easy, though it was also easy for my ideas to get more and more ambitious, and outstrip the intended abilities of the hardware or software I had.

Did you prefer working on the moving graphics or static/presentation screens?
SB: I have always preferred the animation side of things because a bitmap, regardless of its complexity or quality, just sits there independent of your feelings of accomplishment. Sprites come to life from one moment to the next and even the biggest screw-up in the process is exciting in a way because you learn from your mistakes, or they perhaps suggest something you would not have thought of otherwise. The motion combined with the feeling that you have brought something to life is pretty good when you do it well.
SC: I like it all to be honest. The one thing I never really looked forward to was title screens.
JS: I had a lot of fun with both. Every day was an adventure in creating both the static screens and the animation effects.

Did you create the backgrounds as large elements or smaller tiles?
SC: Tiles, for sure. I usually started with some rough ideas either sketched or drawn direct to screen, which formed the basis of the look and feel of the artwork. Once the initial set of designs was done, I then moved on to drawing them within the limits of a tileset, which for something like *Cannon Fodder* was 16x16. The thing with *Cannon Fodder* I had to bear in mind was that each tile had a special 4x4 collision grid – which is how the soldiers in the game appeared to go in and out of small holes, go up and over grass clumps, and step into the water so smoothly.
AM: It depended on the game. Even if they were larger, they were often sub-divided into smaller portions by the copper. *Kid Chaos* used backdrops that were only four colours but appeared to be up to 64, *Lotus* used similar tricks.

How long did the average project take? Any late night sessions as deadlines loomed?
SB: The 'average' project took four to six months, or at least it should have done. *Universal Monsters* dragged on for a year at least, possibly a lot longer and, yes, there were a lot of late night and 'through-the-night' sessions. The Ocean office usually had at least one or two teams working through the night.

FIVE TO SEE

KNIGHTS OF THE CRYSTALLION

■ Created by the late Bill Williams, this is most notable for its use of the HAM – Hold And Modify – mode to give up to 4096 colours on-screen. Described as a 'culture simulator', players made their way through four different sub-games (an arcade maze, a board game, a card game and a 3D-based puzzle game) to earn crystals. These were used to power the knight's suit of armour and trade in the ultimate quest for the Crystallion (a crystal horse).

BANSHEE (AGA)

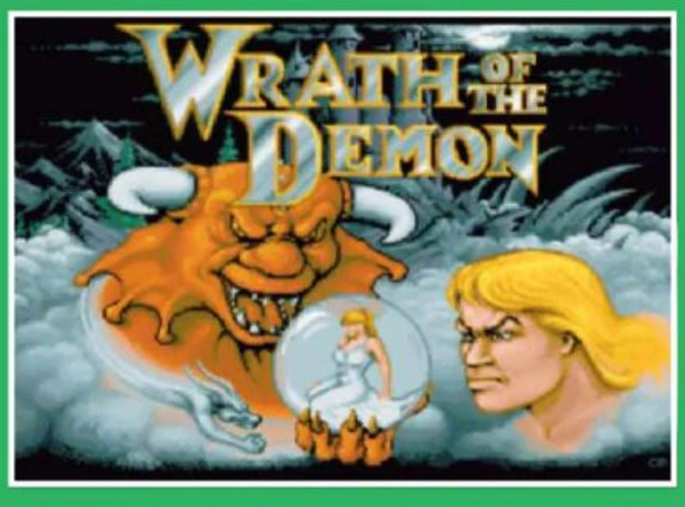
■ Core Design's vertically-scrolling shoot-'em-up merged 1942 with steampunk to produce a stylish result. The level of detail in the backgrounds (with four very distinctive levels and variety in the terrain) and enemy animation is superb, and the sepia-toned presentation screens are brilliantly done.

THE KILLING GAME SHOW

■ Part *Robocop*, part platformer, Psygnosis produced an unusual game with a dismembered human controlling a robot through a dangerous TV studio. The metallic and organic graphics are complemented by a clever effect – the rising OOZE, an organic liquid reflecting what's above.

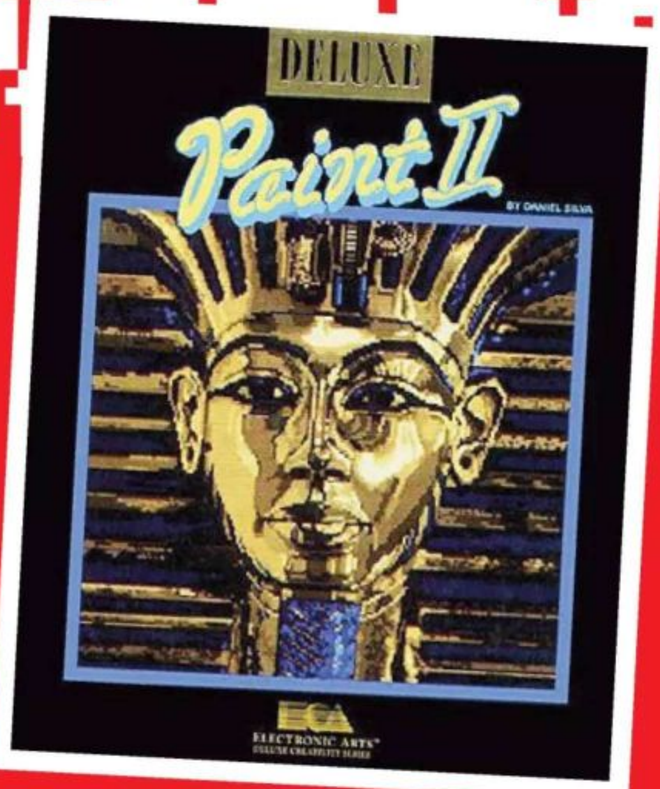
CADAVER

■ This was a tribute by the Bitmap Brothers to the classic isometric games of the Spectrum era. Karadoc the dwarf had to defeat the evil Necromancer, overcoming more than 150 rooms filled with enemies and object-based puzzles. It drew some criticism for its slow pace and difficulty, but still scored highly. Data-disk *The Payoff* and *Zero* magazine cover-disk *The Last Supper* both had four extra levels.



WRATH OF THE DEMON

■ Canadian developer Readysoft was best known for its conversions of the *Dragon's Lair* and *Space Ace* laserdisc games for Amiga, compressing the cartoon animation onto multiple floppy disks. But this arcade adventure had some impressive animation and cut-scenes of its own. The most memorable section was the horse riding, with its multiple levels of parallax scrolling.

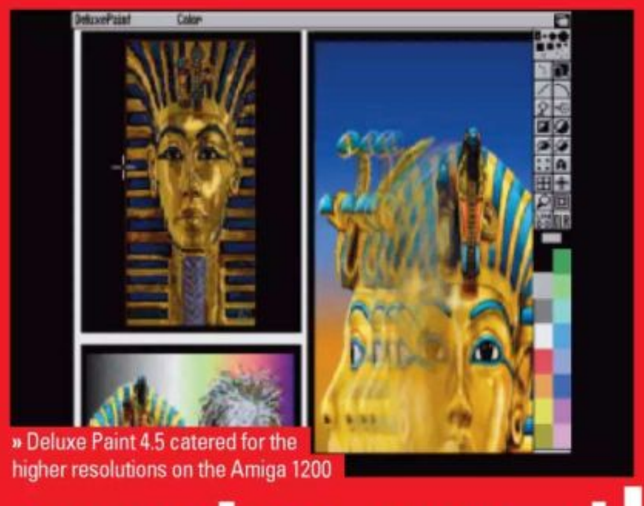


FANCY TINT

"***Deluxe Paint* was** the best thing that ever happened in that period for artists," says Simon Butler. The utility started life as an in-house development tool for EA called Prism, programmed by Dan Silva. The ANIM format for animation stored the changes between frames, pre-dating MPEG compression. Commodore bundled the software with the Amiga, asking EA to create a new version for use with the AGA chipset. Unusually for the time, the buyer could pay more for a version without copy protection. There were versions for PC, Mac and Atari ST, as well as spin-off tools Deluxe Music and Deluxe Video.

Stoo recalls, "*DPaint* at that time was the de facto Amiga art package, but with every new version it seemed to be sacrificing speed for new features. When *Brilliance* came along it felt quick, it felt better and to top it all I could use it in exactly the same way as *DPaint*, one hand on the keyboard, the other on the mouse, the same keys and functions, just quicker and without the bloat."

Most know the myth that the hero of *Monkey Island* got his name from the file being saved as 'guy.brush' – which is simply not true, the file extension for the character created by Steve Purcell would actually have been '.bbm'. To see *DPaint* in action, check out the music video for Junior Senior's "Move Your Feet" by video artists Shynola.



» Deluxe Paint 4.5 catered for the higher resolutions on the Amiga 1200

SC: Too long and sometimes not long enough, there were quite a few late night sessions! The first day I started at Sensible I worked through to create the artwork for *Sim Brick*, I was so keen to make a good impression I forgot the time and well the rest is history, as they say. Creativity is a funny beast, you can spend all day going round in circles then just as you're about to close down and power off an idea will appear and pop up which inevitably you want to see through to the end, cue midnight oil burning, strong coffee and a cool breeze to keep you awake.

AM: In the days of the Amiga, if you couldn't get a game out in less than a year, it would be difficult to make any money out of it because piracy was so rife. Most games took around six to nine months. *Kid Chaos* was an exception. We spent two years developing it, the Amiga market was dying and it was pirated within days.

JS: I think *Ports Of Call* took me about two months, but that was a game that had already been completely finished, and just needed all new graphics. Working on *Defender Of The Crown* was pure hell. Several months of 20-hour days, with no days off. I treated myself to a nice nervous breakdown afterward.

ES: I remember a particular *Aerotoon* animation called 'Shuttlecock', in which I did all graphics and animation in a matter of hours in the computer lab at my college.

Were you ever involved in other aspects of creating the games – design, programming, and playtesting?

SB: I designed a lot of product right from the beginning of my career, basically because there was no one else to do it. I did more designs than ever saw the light of day, I playtested a lot of games and

had a fantastic time which sadly you never really appreciate fully until you look back many years later. There are loads of stories I could tell, like shooting the *Sensible Golf* video in Regents Park with Carl from the band Madness.

JS: Many memories, but the pressure was usually so great that no one had much of a sense of humour during projects. Much of it is just a blur, like grabbing two hours of sleep under my desk each night while working on *Centurion*.

Were there big changes in working with the later AGA graphics modes, or CD-based games?

SC: CDTV was a mare, I do remember Chris Chapman frequently calling it a few choice words during the porting of Sensible Soccer. As for the AGA set we didn't really make use of it at the time. I personally would have been quite happy to do an enhanced version of something like *Cannon Fodder* or even *Mega-Lo-Mania* using the extra graphics modes. The nearest I got to enhancing some of the art was when I converted the *Sensible Soccer* graphics to the Jaguar. Funnily enough I used an A1200 to do the artwork and recall the sheer delight

> "I remember a particular Aerotoon animation, in which I did all graphics and animation in a matter of hours in the computer lab at my college"

even wrote the music for one title.

SC: Although Jon Hare and Chris Yates were the main designers we all put our own ideas into the games. Generally we would have a direction and if it wasn't working we would try other things out until it did. We all became playtesters in that respect.

AM: I started in computers as a programmer - although back then, when you said you were a programmer, you were also an artist, a designer and a musician. For most of my professional career, I was a game designer and artist.

JS: Yes, all aspects. I created *Defender Of The Crown II* for the Amiga CD32 all alone.

Any memorable or funny stories about a particular game you worked on?

SC: Sensible was a great place to work and we

of having what seemed like a zillion and one colours to choose from.

JS: I only did the one piece of AGA artwork, for the Digital Creations *Brilliance* ad campaign. I was working on a computer game version of *20,000 Leagues Under the Sea* in AGA when Disney pulled the plug.

Has the experience been important to your career after the Amiga?

SC: For sure, yes, without the Amiga and ground-breaking software like *DPaint* my career in the games industry would not have followed the path it did.

AM: Europress wanted 'The *Lotus* Team' to develop their next *Rally* game and that was very big for us. The *Rally* games were our most successful and

g The *Lotus* games featured all sorts of clever little effects including anti-aliasing.

h The *Boing Ball* demo debuted at the Winter CES in January 1984, and was often used to demonstrate the multitasking capabilities of the Amiga.

i The Amiga's enhanced colour palette ensured that the conversion of *Space Ace* looked amazingly accurate.

j Another impressive example of Jim Sachs' digital work. This was used in the application *Amiga Dealer*.

profitable and made all the hard work on the Amiga – much of which was very poorly paid – worthwhile in the end.

JS: I doubt if the experience can ever really be equalled. The field was brand-new and wide open. I couldn't wait to get up every morning to create effects that no human eyes had ever beheld on a computer screen.

Whose Amiga artwork did you admire?

SB: Dan Malone, but I always liked Garvan Corbett who I was fortunate enough to meet at an abortive interview with Psygnosis. He was a really nice guy who was happy to show me his work and talk sprites and animation for 30 minutes or so. His stylised work on *Barbarian* combined with the really cool animations impressed me greatly.

SC: A few that spring to mind are Ste Pickford, Dan Malone, Rico Holmes, Simon Butler, Henk Nieberg – I could go on.

AM: Dan Malone was very good – particularly *The Chaos Engine,* but also *Speedball II.*

JS: Brad Schenk. In fact, he's still doing some great artwork on the PC.

ES: Jim Sachs. I've consistently been amazed at the level of realism he has been able to create even with extremely limited palettes.

Do you still own an Amiga and would you ever do new artwork for it?

SC: I do actually have a few of them still, including my original A1000, which I have to say is my favourite. As for doing new artwork for use on an Amiga, I can't see that happening any time soon.

ES: I still have an Amiga 4000 tower that I use frequently, along with an "Amiga-compatible" Pegasos PPC system running MorphOS.

JS: I still have every Amiga I ever owned. Amiga 1000, 500, 2000, 2500, 4000, CDTV, CD32 (even a 'breadboard' model). But no, wouldn't consider doing any new artwork on them. Time marches on.

SB: I never owned an Amiga. I used machines provided for me by clients or the ones in-house at Ocean. I love the fact that the indie and demo scenes are so vibrant now, perhaps if someone makes me a decent enough offer I'll take them up on it. Any takers?

AM: I have two or three Amigas. I often think about doing graphics again for the Amiga – or even the Commodore 64. It would be fun to do something, but I can't think how it would ever happen. We are hoping to relaunch some of our old Amiga games on iOS and Android. That might be the closest I come to revisiting those happy days.

NAMING THE CHIPS

The OCS (Original Chip Set) had female names in a tradition started by designer Jay Miner, with the Amiga prototype named after his wife Lorraine. Paula (audio) was originally Portia, and Denise (graphic timing and sprites) was initially called Daphne, short for Display Adapter. Agnus (Address GeNerator UnitS) had 512K of onboard memory and two special features. The blitter moved large blocks of graphics quickly. The copper (co-processor) allowed rapid changes of graphic mode, colour or sprite position timed to the screen update.

The Enhanced Chip Set of Super Agnus and HiRes Denise had up to 2MB of onboard memory, allowing the blitter to move bigger objects and adding new graphic modes. AGA (Advanced Graphic Architecture) in the CD32, Amiga 1200 and 4000 replaced Agnus with Alice and Denise with Lisa. These new chips gave more colours and smoother scrolling, but PC graphics were already higher res.

» Denise and Paula from the Original Chip Set

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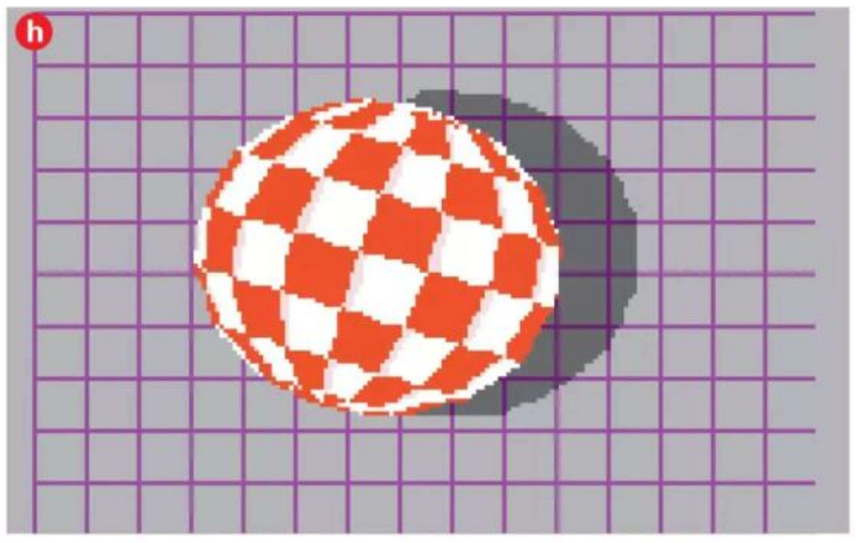
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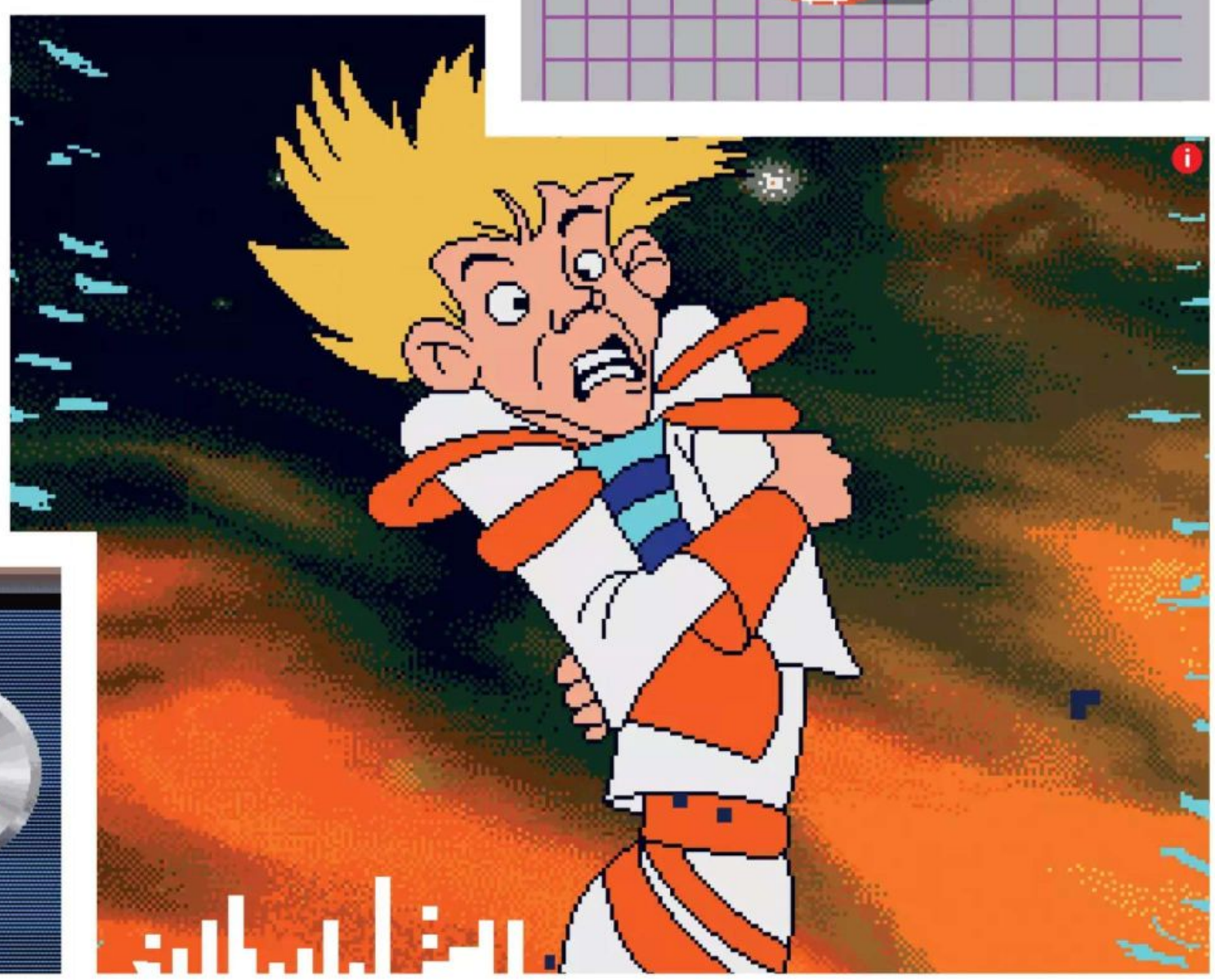
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Special thanks to Daniel Kürsten of the Amiga Graphics Archive – http://amiga.lychesis.net – for his help with this article.

Rainbow Islands

WE REVISIT ANDREW BRAYBROOK'S INCREDIBLE AMIGA PORT

» AMIGA » GRAFTGOLD » 1990

Andrew Braybrook was one of the best programmers to ever appear on the Commodore 64. He created digital gold with every release and helped put both Graftgold and Hewson on the gaming map. He worked similar alchemy with the Amiga, delivering a string of interesting and innovative games, from *Virocop*, to *Simulcra*.

For many Amiga owners, it's his port of *Rainbow Islands* that will remain his crowning achievement on the 16-bit computer, as it's quite simply magnificent. For those completely unaware, *Rainbow Islands* is the sequel to Taito's arcade hit *Bubble Bobble*. Bub and Bob are now in human form and must tackle a series of monster-filled islands, with only rainbow power for protection. Tap the fire button and you'll spit out a rainbow that can trap enemies. Destroy said rainbow and it will kill any enemies it touches, which will then turn into gems or useful power-ups for Bub to collect. It's a great concept, cleverly expanding on the bubble blowing of the original game.

We won't say *Rainbow Islands* on the Amiga is arcade perfect, as we've never discovered every hidden secret, but we will say it's easily the best version of the game we've played, slightly beating the Mega Drive outing due to its superior sound. The controls are incredibly tight; the graphics amazingly accurate, while the level design is spot on, ensuring that you constantly push on - if only to witness the next ridiculously cute boss. ✱

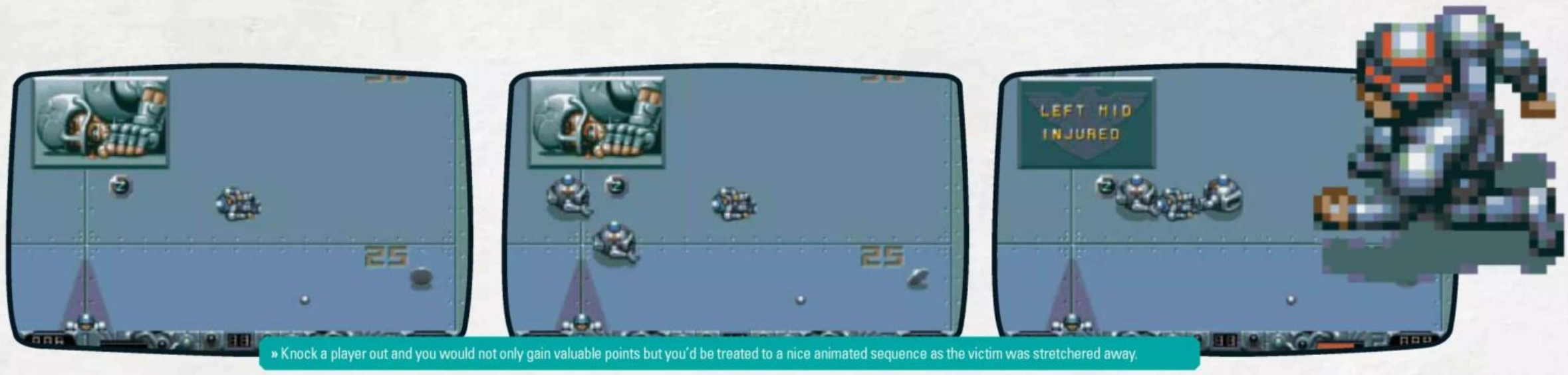
SPEEDBALL 2

BRUTAL DELUXE

A classic that's so good it's made the top of two of our reader surveys. With that in mind we felt it was high time that David Crookes interviewed Mike Montgomery and Robert Trevellyan about their smash hit sports game

IN THE KNOW

- **» PUBLISHER:** IMAGE WORKS
- **» DEVELOPER:** THE BITMAP BROTHERS
- **» RELEASED:** 1990
- **» PLATFORM:** VARIOUS
- **» GENRE:** FUTURISTIC SPORTS



» Knock a player out and you would not only gain valuable points but you'd be treated to a nice animated sequence as the victim was stretchered away.

Icecream, icecream," shouts the seller, the words cutting through the tension as the seconds tick away of the second half with only five points putting distance between the opposing sides. The metal thud of the ball reverberates as the players dart mesmerisingly around the cold, grey arena. But then, as a sliding tackle knocks a hapless opponent to the floor, there is a moment of stone-hearted relief as he fails to get back up again. With the medics carrying him off, Brutal Deluxe are perversely awarded ten points and the advantage swings 180 degrees. In exhaustion, the gamer puts down a battered joystick and, with a wipe of a sweaty hand, manages a triumphant smile.

This is *Speedball 2*, a game developed by the acclaimed Bitmap Brothers which was released in 1990, two years after its predecessor had caught the mass attention of players. This time around the game was set in 2105, a short while after the sport was said to have to have been reborn in an attempt to regain public interest following years of corruption and violence. As the opening titles explained, the fictional sport had been forced underground to fester in unregulated chaos. *Speedball 2* was its saviour and it brought with it a whole new set of rules.

Players who expected a straightforward sequel to *Speedball* were pleasantly surprised by the series' second outing. According to The Bitmap Brothers' co-founder Mike Montgomery, the sequel had been completely rewritten. Although the ethos of the earlier incarnation had been retained, *Speedball 2* brought with it new mechanics and an improved feature set. It also introduced Brutal Deluxe, a badly performing team that the player had to turn into champions.

In order to achieve the new feel to the game, The Bitmap Brothers made changes to the original development team. Dan Malone replaced Mark Coleman as the artist, and Richard Joseph replaced David Whittaker as the musician. Robert Trevellyan was given the role of coder, with additional input from Mike who had assumed a greater programming role during the first game. This time out, the design was credited to Bitmap Brothers co-founder Eric Matthews.

"I think the whole concept of *Speedball 2* was different," says Mike. "What we wanted to do with *Speedball 2* was all of the things that we really didn't have time to do with *Speedball*. So the viewpoint was slightly changed, the graphics were a lot better – it was a different game to a certain extent, wasn't it? I think *Speedball 2* was just a natural progression."

Speedball 2 was Robert's first published game. Although he had been a keen hobbyist programmer, his one previous stab at a game, for Electric Dreams in Southampton, had been canned after six months but the lead artist on that title had put Robert in touch with The Bitmap Brothers. The team was impressed by an eight-way scrolling demo which Robert had shown them running on a Commodore 64. "It convinced them that I was worth a try," he admits.

The game's lead platform was the Atari ST. "It was the less powerful of the machines, certainly when compared to the Amiga, so the idea was to make it great on the ST and then enhance it on Commodore's machine," says Robert. He said the brief was to address "all of the things that had felt limited in the first game." One of those was the playing area, which, in the original, had very little width and would simply involve players trying to get the ball up towards the goal in order to score a goal.

"SPEEDBALL 101"

■ *Speedball 2* is a top-down, 2D, futuristic, deep and violent game that is part-ice hockey and part-American football. Each smooth-scrolling match is split into two halves lasting 90 seconds each, during which players score as many goals as possible while grabbing extra points by nobbling the opposition or aiming the ball at point-scoring stars. Good use of tactics and the score multiplier are essential to win a game.

» A letter above a player's head denoted their playing position while a curve showed a player that could be passed to.

FEELING HUNGRY? IT'S RICHARD JOSEPH'S FAULT

Discover why Speedball 2 loves its icecream

Quite aside from the game's intro being a computerised version of a song called *Brutal Deluxe* by a band called Nation 12 (a collaboration between the electronic pioneer John Foxx and Tim Simenon from Bomb The Bass), *Speedball 2* was able to showcase the talents of the gaming audio legend Richard Joseph who died in 2007 at the age of 53 following a short battle against lung cancer. His approach to the problem of creating memory-hogging crowd sounds was inspiring.

"Richard came in one day and said, 'Mike, I don't really want to show this audio to anyone else until you have listened to it and given your approval because I'm not really sure'," recalls Mike. "So I said, 'okay, come in', and we went into another room. He played that clip 'icecream, icecream' and I went, 'shit, that has just to go in, there's no argument about it, I don't care what anyone else says, that has to go in full stop.' And of course it became a famous phrase in the industry, and I even had it on my doorbell at some point. Richard was just a genius like that and we worked so well together. It's a shame that he passed away. What would he be doing now?"

HISTORY OF SPEEDBALL

Your guide to the short-lived series

SPEEDBALL

■ The Bitmap Brothers planned a game based on real tennis, the sport from which lawn tennis is derived but Mastertronic decided against it. After hitting the pub and redesigning the game on the back of a cigarette packet, *Speedball* was born. Praised for its action, it was also criticised for jerky scrolling.

SPEEDBALL 2: BRUTAL DELUXE

■ This eight-directional frantic sweat-'em-up of catch-and-throw was a huge improvement on the first game, racking up the tension by emphasising the amassing of points over the simplicity of scoring goals, and providing a level of depth rarely seen in any sports game, let alone one based on a fictional pursuit.

SPEEDBALL 2100

■ *Speedball 2100* was a 3D version of the series for the PlayStation, "but it didn't do too well for various reasons," says Mike Montgomery. It concentrated too much on side issues, such as the skin and hair colour of its players, and less so on refining the on-pitch experience for a new next-generation audience.

SPEEDBALL 2 TOURNAMENT

■ Released in 2007 on Steam, the same year that a faithful remake of *Brutal Deluxe* hit Xbox Live Arcade, *Speedball 2 Tournament* rode on the back of a *Half-Life 2* mod called *SourceBall*. Mike Montgomery oversaw development and the polygon characters looked markedly different. It brought online play to the game too.

SPEEDBALL 2: EVOLUTION

■ As with many retro games, *Speedball 2* found its way to iOS, Android and PSP ,and proved itself to be a timeless gem. Despite some disappointing AI, the translation was a success, allowing for the use of the virtual joystick while supporting the accelerometer of mobile phones.

SPEEDBALL 2 HD

■ The relatively recent release of this PC game gave the original game a glossy graphical sheen. It had input from Mike Montgomery and *Sensible Soccer* creator Jon Hare and it replicated the distinctive look of the 16-bit originals while serving six new *Speedball* arenas. Steam still has the game for £6.99/$9.99.

▶ "In the first game, you only ever played 'up' the screen but in the second they wanted to expand this," he explains. By creating a larger playing area for *Speedball 2*, the developers were able to increase the number of players on the pitch from five on each side to nine, and it also allowed the game to be played with far greater freedom while allowing action in the centre of the pitch to be just as vital at that at either end, for reasons we will come to later.

"The pitch was about three times bigger because we had learned how to scroll the screen a lot better," says Mike. "The larger playing area enhanced the game, and it allowed for more things to do. It also enabled players to make better use of tactics. By having this wide, open scrolling, there were more players that would be off the field. We wanted players to work out where they may be and to plan ahead, things like that. Getting to grips with the technology and mechanics of the game in this way also let us work on the overall look and feel of the game to the point that, technically, *Speedball 2* was a lot better than the original game."

Work on the game's playing field had come first. "We made a very simple background for most of the screen, using 16x16 tiles for the main areas of the pitch because the Atari ST didn't have the graphic acceleration hardware that the Amiga had," Robert explains. "That allowed us to put some bonus features around the edges of the screen and the bouncers on the pitch. Those bouncers were the only unique elements on the pitch – the rest of it was a repeating pattern and it meant the game could flow much better."

> **"The pitch was a lot bigger because we had learned how to scroll the screen a lot better"**
>
> Mike Montgomery

During the subsequent conversion to the Amiga, the background was enhanced. The palette was upped from 16 to 32 colours and the design became, as Robert explains, "more interesting". For the ST, it was a case, he remembers, of "blasting most the screen background very quickly," and having preloaded registers, whereas on the Amiga, the team could make use of the various graphics acceleration chips. "We were squeezing everything that we could out of these machines," says Robert. "But I was this young guy with his foot in the door of the games industry and loving it. I had the confidence that I had the skills and ability to make it happen."

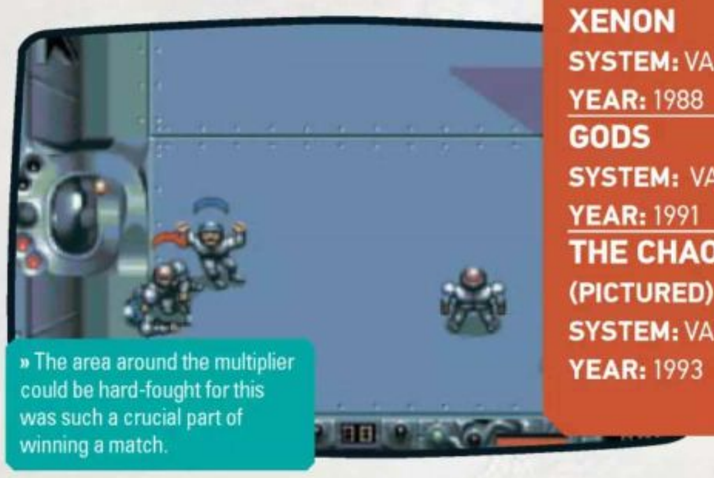
To aid him in developing the game (which also saw many outings on handheld and home consoles), he was able to make use of in-house library routines that The Bitmap Brothers had created. They had some basic sprite routines and code set up on the Amiga but the main issue was that the coders were working with the same amount of memory for *Speedball 2* as they were for *Speedball*. "Cramming all of that in was a problem because we had to work with the lowest spec machines," says Mike.

"There were bits and pieces and skeleton code that were useful although almost all of the code was new," Robert continues. "Even with their library of sprite routines, I saw there was an optimisation we could perform on the main loop. I also instinctively took an object-orientated approach to the software before the concept of software engineering became the way. All of this combined to make a bigger and better version of the original *Speedball* game."

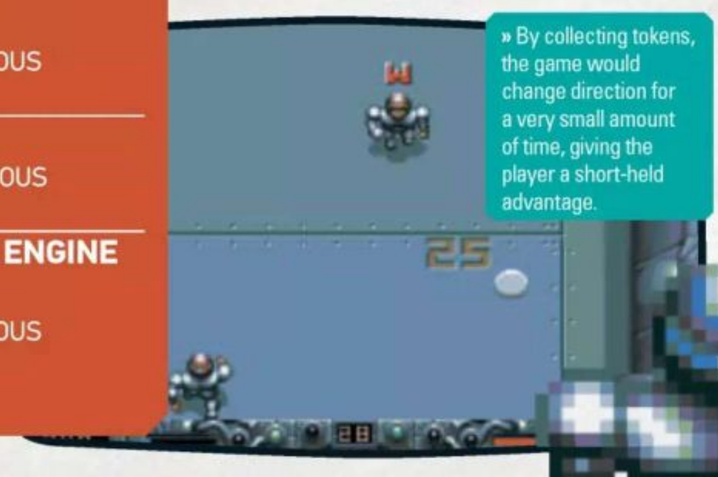
It was also fast. "The frame-rate was a lot better," says Mike, "and that was important because the better it was, the better the game experience of that type of game would be. It wouldn't matter for a turn-based game but with an action game, you

» Goals were not the only important part of the games, amassing points via other means such as star collecting were crucial winning tactics.

» Although Mike Montgomery insists the game was not a violent one, brutal tactics were very much at the fore. Ouch.



» The area around the multiplier could be hard-fought for this was such a crucial part of winning a match.



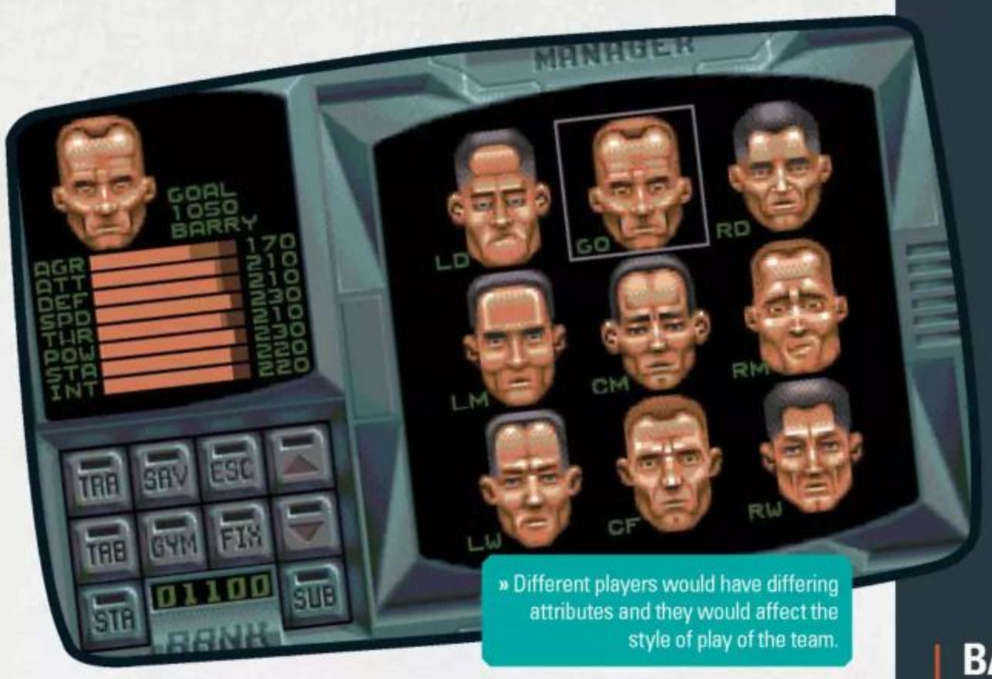
» By collecting tokens, the game would change direction for a very small amount of time, giving the player a short-held advantage.

DEVELOPER HIGHLIGHTS

XENON
SYSTEM: VARIOUS
YEAR: 1988

GODS
SYSTEM: VARIOUS
YEAR: 1991

THE CHAOS ENGINE (PICTURED)
SYSTEM: VARIOUS
YEAR: 1993



» Different players would have differing attributes and they would affect the style of play of the team.

» *Speedball 2* was a challenging game and boasted tough computer opponents.

needed to be slick and quick." Players would have to keep an eye on the kind of players that were in view on the pitch. Icons above their heads would reveal whether the sprites were open to a pass and they would indicate their playing position – W for Winger, D for Defence, M for Midfielder and F for Forward – to allow gamers to make effective passes.

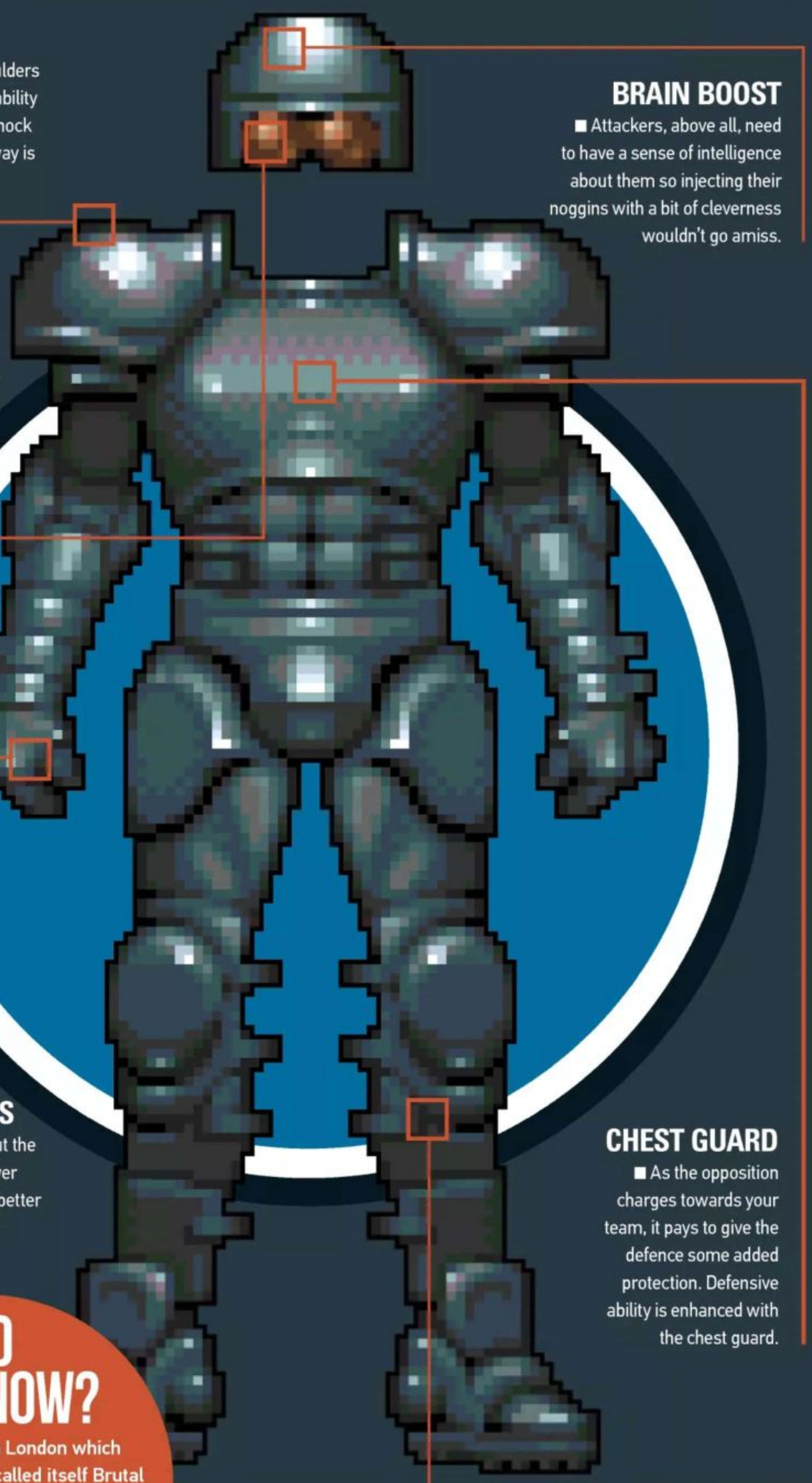
There were lots of power-ups too which would reverse the controls, increase player stats, protect players or zap opponents. Some would boost player attacks and others would give an injection of stamina. Coins could be collected and be spent on player enhancements. There was even a management element, letting gamers choose a manager before training and building up nine players and three subs (while dipping into the transfer market for star players). It was possible to develop players one by one. "The management elements were added to give greater depth," says Robert. "But we made it so that people who didn't want to think about it could click auto and have the game spend the money on enhancing players while those that did want to get stuck in were able to think about who they wanted in the team and the attributes they wished to choose."

As well as having warp holes which would instantly teleport the ball from one side of the playing space to the other, *Speedball 2*'s gameplay – whether league, cup or one-off match – was enhanced by the addition of many new features, the combined nature of which changed the approach players would have towards the game. There was an overhauled scoring system, which not only put a fresh twist on the points a goal would amass for a team, but allowed players to chalk up better scores according to the tactics they employed over the course of each half.

The most important of these were the coiled score multipliers which lay across from the centre of the arena to the left and right of the screen, each containing a set of lights and each of them capable of giving players a points bonanza. By throwing the ball up the ramp of the multiplier, it was possible to increase the number of points that was awarded for goals and other score-enhancing feats. ▶

POWER-UP

Spending a little bit of time in the gym to upgrade the attack, defence, stamina, aggression and intelligence levels of your team is well worth your while



BARGE PADS
■ By plating up the shoulders of your attackers, their ability to power forward and knock the opposing players away is greatly increased.

BRAIN BOOST
■ Attackers, above all, need to have a sense of intelligence about them so injecting their noggins with a bit of cleverness wouldn't go amiss.

BITMAP SHADES
■ Getting one-up on the opposition and ensuring they are thumped to the ground is important in *Speedball 2*. The shades enhance aggression.

POWER GLOVES
■ *Speedball 2* is all about the throwing and these Power Gloves bring with them better throwing prowess.

CHEST GUARD
■ As the opposition charges towards your team, it pays to give the defence some added protection. Defensive ability is enhanced with the chest guard.

SPEED BOOTS
■ As the name suggest these enhance the speed at which an individual player is able to chase around the pitch.

DID YOU KNOW?

A metal band from London which was formed in 1997 called itself Brutal Deluxe in homage to *Speedball 2*. It released three albums and numbered Johnny D.Brutal, Guary MacSeanlaoic and Christian D.Lux as members.

SPEEDBALL TIPS

Learn to play with Robert and Mike

SHOOT WELL

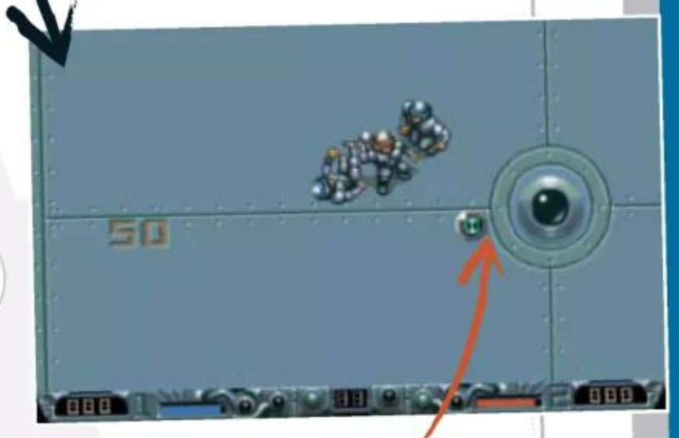
■ "You have to learn how to hit the intermediate angle on shooting," says Robert Trevellyan. "Move the joystick to the side in between pressing the button to release the ball and the ball leaving the player's hand."

GO FOR THE LEAGUE

■ As well as rewarding a win or draw, a league point is awarded for every ten points scored in a match so a good performance against a poorer team can give you a good position. "You have a better chance to win the league than the cup if only because one loss and you're out in the knockout," says Robert. "I never won the cup."

STAR ATTACKS

■ Getting goals isn't easy but getting stars are, so make your way to the sides of the pitch and hurl away for points. Get all the stars and bank the points.

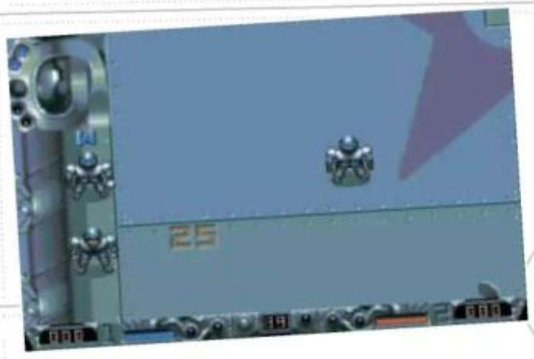


HEAD FOR THE MULTIPLIER

■ The best way to get a good lead is to ensure that every point you gain is optimised. The only way of doing that is by throwing balls into the multiplier early on.

GRAB THE TOKENS

■ Tokens affect the whole team and lasts six seconds. Freeze team tokens halt opponents, reduce team tokens lower opponent attributes, goal doors prevent goal scoring, grab ball gives you possession.



HANG AROUND

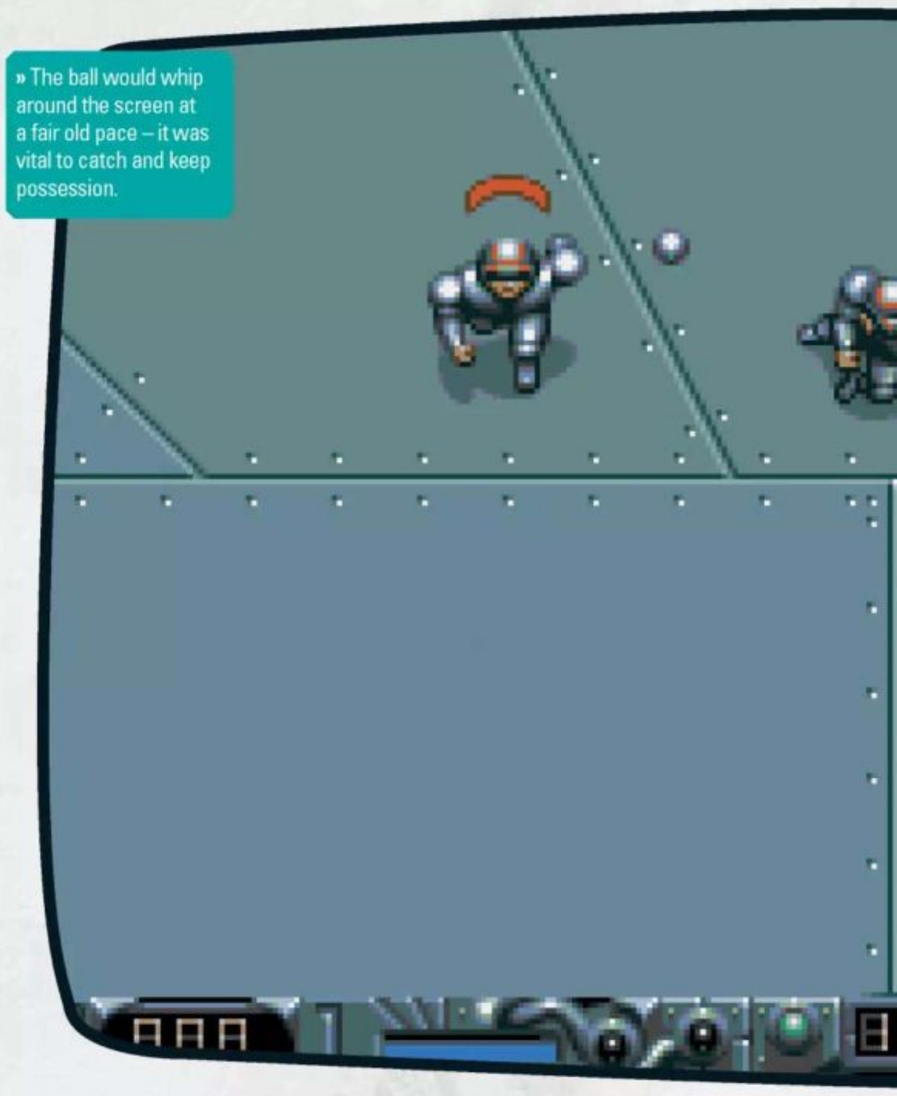
■ You should aim to linger around the multiplier and see off challenges with a few punches. Should the opposition attempt to cancel your multiples, quickly get the ball away.

USE THE BOUNCE DOWNS

■ "You have got to watch your timing and go for the bounce downs and the electrobounce – even if the electro ball runs out, you still have a chance of winning because the goalies cannot normally get to it in time and it confuses the player." Sound advice from Mike.

BUY QUALITY

■ Playing the game on the original hardware? "You have to be fast and you need to have a high quality joystick," says Robert. "You'll destroy any poor-quality joystick."



» The ball would whip around the screen at a fair old pace – it was vital to catch and keep possession.

When no lights were lit, a goal would be worth ten points, when one light was lit, it would be worth 15 and when two lights were lit, goals were worth an impressive 20 points. To the side of the multipliers were a series of five stars. When these were hit by the ball, they would give the player two points. But if a multiplier light was lit, that would increase to three points and if two lights were turned on, it would lead to four points. "Although the idea for this all of this was most likely thought out at the start by Eric, I don't remember the nuances of the scoring system being laid out in detail," says Robert, struggling to recall the exact timings. "A lot developed along the way."

And develop it did, with players quickly realising the true complexity that lay behind the waypoints were earned. Players who managed to get all five stars, for instance, would receive a bonus of ten points but if a multiplier light was on, that would increase to 15 and, if two were on, it would see a return of 20. Still, that wasn't it, though. In between the centre spot and the goals were bounce domes. When these were hit, the ball would fly away and lead to scores of two, three or four depending on the multiplier's status at the time.

The multiplier was also used in conjunction with the 'electrobounce', a feature that was placed further along the wall from the sets of stars. It would give the ball an electric charge that would only wear off when the ball became still or the opposition gained possession. When the ball was charged, players who tried to pick it up would be automatically tackled. The number of tackles would depend – you guessed it – on the number of lights that were lit up on the multiplier.

"The basic scoring methods and warp gates were inspired by *Pro-Pinball*," laughs Mike. "In fact, a lot is based on a pinball machine really. We just thought it would be a good idea to do something different and to say this is not a football game. We wanted something that had virtually no rules with a scoring mechanism that would let you boost your points which is where the multiplier and bounce domes came in. Part of

"We were squeezing everything that we could out of these machines; pushing the hardware to the limits" Robert Trevelllyan

actually winning in *Speedball 2* wasn't down to scoring goals but using the features to the best advantage."

That was certainly true. One hit on a bounce dome at the right time could give a player all the advantage needed to win a match. "In football, you may get a corner and you need to score off of it," Mike explains. "In *Speedball*, you could be in a tight position with a few seconds left, go for a bounce dome and bang, you've won the game. It's what made the game exciting and it's why people still play it. I mean, two years ago I was on the Underground in London, and two guys were talking about *Speedball 2* on the Amiga and it was, like, f**k! I would have told them that I made the game but it was too packed and I had to get off, but I heard this conversation and it was, like, f**king hell, people still talk very passionately about it."

And yet that is only half of the story when it comes to the gameplay. While players could head for the multiplier and attempt to boost their points tally, the opposing team was able to turn the lights off and wipe away any hard-fought for advantage. The only real way to prevent the opposing team from getting the upper hand was – as in the first game – to get stuck in. As a result, *Speedball 2* was a tough, physical on-screen sport and there were a great many pixelated casualties.

But suggest that it was a violent game and Mike is quick to jump in. "There was no violence in the game at all. It was how you perceived it," he says. "There was no blood and there was no gore. It was up to the player whether they felt it was violent or not. And that was intentional." Still, the game was very much about tackling opposing players head on, ramming them out of the way and gaining possession. What's more, ten points were awarded for every opponent who had to be carried off. In such circumstances, little mechanical droids would enter the field of play with their sirens and lights flashing before picking up the poor soul and taking him away for treatment.

GAME ON

More sports game with a heavy sci-fi influence to discover

SKATEBALL

■ *Speedball 2* is often claimed to have been inspired by the movie *Rollerball* but Mike denies it. *Skateball*, on the other hand, most likely was. As an ultra-violent futuristic version of ice hockey mixed with football, the matches could be won by destroying the opposition, or by scoring five goals.

CYBERBALL

■ In 2022, American football is played by well-armoured robots controlled from a safe distance by humans. Or at least that is the premise of Atari's *Cyberball*, a vertically-scrolling game in which you score a touchdown by carrying the ball across the end zone while dealing with an explosive ball.

KILLERBALL

■ Chucking together roller-skating and American football, *Killerball* is a five-a-side blast which became another of gaming history's cruel titles when it was released in 1989. Players can muscle the ball off the opposition by flattening them to the ground before trying to push the ball into stupidly small holes in the wall.

SUPER BASEBALL 2020

■ While this game has baseball's traditional rules at its core, the Cyber Egg Stadium and presence of robot players ensures it's anything but a contemporary riff on the sport. As well as the use of violence and land mines, money rules: good play is rewarded by cash that can be spent on upgrades.

BILL LAIMBEER'S COMBAT BASKETBALL

■ The NBA's website says Bill Laimbeer was "one of the most notorious players ever to throw an elbow," but he used his reputation to his advantage in this game. Set in 2030, Bill has decided to chuck out the rulebook. As the name suggests, a violence is the key to winning.

DEATHROW

■ Showing that violent, futuristic sports games were not a thing of the past (ironically enough), *Deathrow* became a welcome addition to the genre upon its release as an Xbox exclusive in 2002. With players fighting their way to try to get a glowing disc through a hoop, the game has proven to be furiously fast and fun.

This animation was one of a number of graphical flourishes placed in the game by Dan Malone, a talented artist who also worked on many other games for The Bitmap Brothers including *The Chaos Engine, Cadaver* and *Z*. He began working in the industry when his preferred early career path drawing comic strips floundered due to a lack of work but his loss to comics at the time was certainly gaming's gain.

"Dan Malone brought a lot of expertise in games to *Speedball 2* and he did an excellent job," says Mike. "That's not to put Mark Coleman down – he was working on *Gods* and that game has superb graphics. The Bitmap Brothers was expanding at this time, and we were working on more games so we wanted a bigger pool of talent. It was a natural progression and we were also striving to be the best and to get better each time. With *Speedball 2*, we had the right sound effects, programmers, music and art and the package as a whole was what made it special."

As always with a Bitmap game, the team spent much time on polishing it. "The Bitmap philosophy was that a game would be finished when it was finished and so it meant many days getting it right," says Robert. "It drove me nuts but that's how they built their reputation. We also wore out an enormous number of joysticks on the game – it was punishing it on joysticks and would make the wrist hurt."

This all combined to make a smash hit game upon which critics lavished praise. "We weren't surprised by that," says Mike. "It's a better game than the original and it was also the first two-player to hit the mass market that worked – give or take *Pong* as the first." It was also as perfect a rendition of *Speedball* as it would ever get. "*Speedball 2* was a good game and it was hard to beat. We were very proud of it."

» By collecting coins, it was possible to soup-up the players with various extra powers to make for a better overall side.

» [Amiga] Stat attack, ahoy! Before a game, players could check out what they were up against.

BEAUTY AND THE

OF BEASTS

The original Shadow Of The Beast is famous for many things: impressive visuals, great use of parallax scrolling, David Whittaker's fantastic score and being harder to finish than a glass of vinegar are just a few that we can think of. We can further list its lavish packaging and wallet-emptying price tag. Stuart Hunt speaks to Reflections' boss Martin Edmondson and discovers the story behind the studio's polarising Beast trilogy

Shadow Of The Beast

Having finished the Amiga game *Ballistix*, a budget *Crossfire*-style game for Psygnosis that shares the same fantasy aesthetics as the *Shadow* series, Reflections co-founder Martin Edmondson began reading Addison-Wesley's *Amiga Hardware Reference Manual* and, becoming interested in parallax scrolling techniques, found a cornerstone for the studio's next game.

"I did a technical sketch laying out the points and speeds at which different parallax layers should scroll and where to swap between the two playfields to produce a deep parallax effect," he recalls. "For its time the Amiga's co-processor (the 'copper') was an amazingly powerful bit of hardware that allowed you to precisely control all sorts of things at raster line level, including colour changes and hardware scrolling rates."

Martin was impressed by the power of the Amiga: "It made every other machine look steam-powered. It did things like twin playfield hardware scrolling in 60fps while playing high-quality stereo samples. Things that would have taken a room full of Atari STs to achieve." He saw the computer as the perfect platform to push the multiple parallax scrolling layers that he felt could be used to create the immersive fantasy world of *Shadow Of The Beast*.

A fantasy tale of revenge, *Shadow Of The Beast*'s story told the tragic tale of Aarbron, a goat-headed warrior who makes the grisly discovery that he was born a human boy and snatched away from his parents as an infant by his master, Maletoth, the Beast Lord. Transformed into a monster and groomed to be Maletoth's servant, all recollection of Aarbron's past is soon forgotten – that is until he witnesses

Beauty of the Beasts

Cast no Shadow

THOSE WHO HAVE played *Shadow Of The Beast* may have noticed that its title screen doesn't actually display the game's full title and instead refers to the game simply as *Beast*. Intrigued as to whether or not there was a reason why this is – perhaps a late name change or technical limitations on the title screen – we put the question to Martin.

"I originally wanted to call the game simply *Beast*, but when Psygnosis did all of the usual legal checks there was a problem – an obscure arcade game, if I remember correctly – so we added '*Shadow Of The*', and Roger added a shadow to the right-hand side of the box artwork. That big purple *BEAST* logo on the scrolling screen stayed as I'd already drawn it and no one noticed or cared about that singular appearance of the original name."

» *Shadow Of The Beast* started out as a tech demo for the Amiga that "morphed into a game" as production moved along, according to Martin.

the sacrificial death of his parents and some suppressed memories are triggered. With the truth exposed, Aarbron is understandably left baying for his master's blood and sets off to exact vengeance.

"Artistically I was a big fan of artists such as Roger Dean and Rodney Matthews, and that drove the desire to create the fantasy world and look," Martin tells us "On a technical level, [*SOTB*] was heavily influenced by arcade games of the time in that I was adamant the game should run in 60fps, which was pretty much the norm in arcades. Basically it had to feel more like an arcade game than a home computer game."

Shadow Of The Beast's story stretched across all three games, with the player always assuming the role of Aarbron but his appearance altering slightly – gradually becoming more human. The individual stories, enemies and bosses of each episode were designed and developed as the production for the games went along, with the idea of Aarbron gradually regressing from creature back to human form the only aspect that was planned early on.

In addition to the game's striking parallax visuals, praise was lavished on its atmospheric and high-quality score by musician David Whittaker. One of the busiest and most in-demand videogame music composers working at the time, and having written music for a number of titles for Psygnosis in the past, David was brought in to work alongside Martin to compose the music for the game.

> **"It had to feel more like an arcade game than a home computer game"**

"He [David] was also good technically and we didn't have time to write a player and everything involved with that," says Martin. "I spoke to him early on and discussed the direction for the music in quite a bit of detail. The problem was at the time he used a recognisable and fixed bank of samples that were low-ish audio quality but extremely efficient on memory, and I wanted to do something completely different – high-end Fairlight-type sound – so there started a long negotiation with him and re-sampling every instrument specifically for *Beast*."

Released in 1989, *Shadow Of The Beast* became a popular title for the Amiga, with the middling review scores it received doing nothing to harm its runaway success. Many reviewers at the time felt that *Shadow Of The Beast* was little else but a great showcase of the graphical and audio capabilities of the Amiga, and while this assessment seems a little unfair if you consider the fact that the game was essentially trying to ape the feel of a side-scrolling action arcade game – though its story and visuals do hint at it being something a little more cerebral – it's a feeling that's not entirely unwarranted. And Martin agrees.

"I don't think that is fair for *Beast II* and *III* due to the number and complexity of the puzzles, but yes, that is probably fair comment about *Beast I*. It was started as a technological demo that sort of morphed into a game as we went along, so it was pretty simple in gameplay terms. Gameplay flexibility was severely limited by the graphics mode chosen. Monsters, for example, could only be moved over one of the two playfields – notice how they died, for example – so that was a deliberate style-over-substance decision.

Despite Martin's candour about why some reviewers may have felt the game lacked substance, many Amiga owners thought that *Shadow Of The Beast* was something special. It was seen as a wonderfully polished game to show off the true untapped power of the Amiga, something far removed from the raft of uninspired ST ports that so often found their way to the computer. *Beast* went some way to help cause a shift in Amiga gaming as far as visuals and imagination was concerned. The substance would come later.

Shadow Of The Beast II

For the sequel, Reflections had a clear aim to improve and enhance on the original game, not really looking to implement any drastic or thematic changes but expand on its gameplay while addressing the criticisms of its simplistic design. Martin told us that the simple nature of SOTB's gameplay can largely be attributed to the visual fidelity of the game: the team had effectively hit a ceiling and found themselves hamstrung when it came to design. If they wanted more variety in the sequel, they would have to rethink their approach.

"*Beast I*'s actual game design was severely restricted by the graphical modes chosen for that game – producing colourful scenes, many layers of scrolling, colourful monsters. We had pushed that about as far as we could, so for *Beast II* we designed a completely new scrolling system that, although less impressive graphically – fewer colours, less parallax – allowed the game to scroll in many directions, and, crucially, have sprites moving pretty freely anywhere we wanted in the scenery. This, of course, freed up the game design restrictions so we were able to design interesting puzzles into the game. Most of my inspiration for them came from films like *Indiana Jones* or from the many text adventures I had played when younger – Infocom stuff and one or two of Acornsoft's on the BBC Micro."

As well as a few layers of parallax, the sequel was missing the talents of David Whittaker. But while his score was an integral part of the original game, and even having worked so closely with David to produce the sound for the first game, not having him on board wasn't a massive concern for Martin.

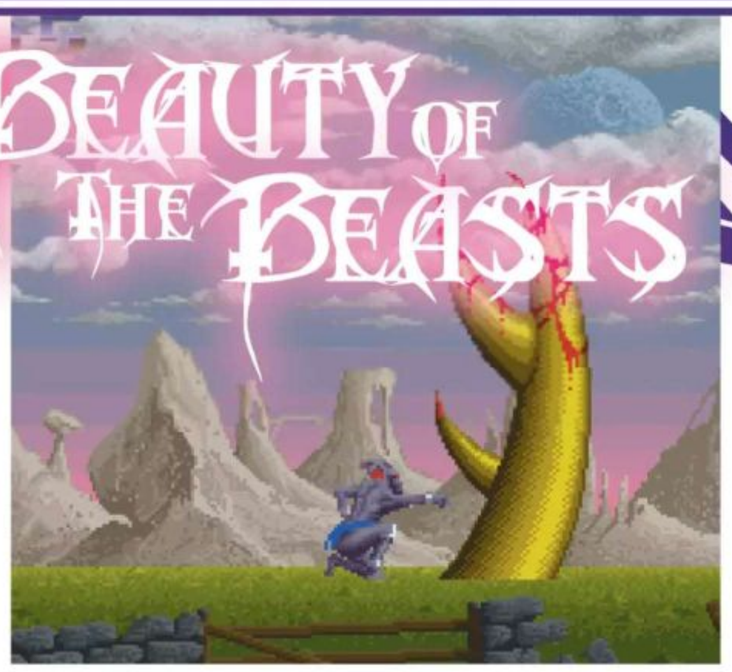
"He was probably sick of me by the end of *Beast I*! I remember being so particular about it at

» As well as featuring more imaginative puzzles, the sequel allowed Aarbron to chat with the game's denizens, which helped make it even more atmospheric.

Caging The Beast

ALL THREE *Shadow Of The Beast* games were pretty pricey titles for their day. The first game especially retailed for a whopping £35, and this was in 1989. To help soften the financial blow, though, the game came with some pretty lavish packaging, which included a large box and a T-shirt featuring a print of the game's iconic box artwork by Roger Dean. So how did the idea for the sumptuous packaging and the collaboration with Roger come about? Martin explains.

"That was down to Ian Hetherington and Jonathan Ellis, the guys that ran Psygnosis at the time. I guess they saw the potential in the game to make a bit of a splash so backed it heavily. They were friends with Roger Dean, who was one of my favourite artists as it happened, and since he had painted previous game boxes for them such as *Brataccas* and *Obliterator*, the artist was an easy, if expensive, choice. The decision to go with that massive box and T-shirt to enhance the feeling of value followed. Must have been a nightmare for retailers..."



the time. I was practically specifying notes as well as instrument samples. I had a clear idea of what I wanted to do with the sequels: more of a melancholic electric guitar in the death sequence replacing *Beast I*'s pipes. Not that I was a musician or anything; everything was heavily inspired by other things such as films or CDs or whatever."

Fairly late on the project, though, musician Tim Wright was approached to work with Martin and write the score. At the time, Tim had been working for Psygnosis on a freelance basis, and, after finishing writing the music for *Puggs In Space*, saw his big break when the publisher asked him if he would like to score *Beast II*. Working directly with Martin, Tim was able to produce another excellent soundtrack for the series, which was just as well-received by fans.

Shadow Of The Beast II's story picks up shortly after the first game. Aarbron is now partially returned to his human self, now looking like a primitive man, and the objective this time centres on the rescue of his baby sister from Maletoth, who is now looking for a new warrior messenger to take Aarbron's place. The game was notably darker in tone than the first, kicking things off with a terrifyingly cinematic opening showing the abduction of Aarbron's sister by a dark-winged dragon. Visually and sonically the game was gloomier in tone too, with muted palettes and the brightness levels cranked down. Tim's deft use of electric guitar samples and synths on the soundtrack provided a bleak and moody ambience to the land of Karamoon, most noticeably in the game's excellent death screen music, which actually helped soften the blow of dying in the game. Well, a little.

"Beast's design was restricted by the graphical modes chosen for it"

Indeed, while Reflections had focused on complementing *Beast*'s action with more complex puzzles, as well as other new features such as allowing Aarbron to converse with the various inhabitants of Karamoon, some felt all still wasn't quite right with the gameplay – with the biggest issue once again being the game's difficulty. While some welcomed the inclusion of more intricate puzzles, others felt they were too cryptic. The fact that some had to be cracked first go, and that it was possible to reach parts of the game without having first obtained the items needed to progress properly, was understandably also the cause of much molar-gnashing.

"All our games were difficult," muses Martin when we asked him about his opinion on the game's difficulty. "They were probably right. I do remember a lot of split-second timing and puzzles that would trap you if you made a wrong move – game design features that no one in their right mind would put up with now."

Forgiving the fact that *Beast II* didn't look as impressive – an unusual thing for a game sequel, even today – and was a lot tougher than the first game, press and fans considered the more involved gameplay

Conversions Of The Beast

Shadow Of The Beast was ported to a number of systems. Here are some of the conversions... and one that never saw release

Mega Drive

■ If you think the Amiga version was challenging, we dare you to try the Mega Drive port by Victor Technologies. Its notorious difficulty stems from the bizarre speed at which the game scrolls. With enemies running towards you as if you're controlling Ringo Starr and the game is set at the height of Beatlemania, it makes hitting them extremely difficult. And given the fact that you only get one life, the gameplay boils down to a joyless memory test, with you remembering the enemy order and attack patterns to inch slowly through the game.

Lynx

■ The Lynx delivers a great port that loses none of the game's famed parallax scrolling, crisp visuals or marvellous music, though the fact that this is one of the only ports on which Reflections assisted may have had something to do with its quality. Having said that, the game is again unmercifully challenging, and although being given three continues is certainly welcome, with no save function *Shadow Of The Beast* doesn't really lend itself to portable gaming, being an often frustrating and lengthy game with no way to save your progress.

Commodore 64

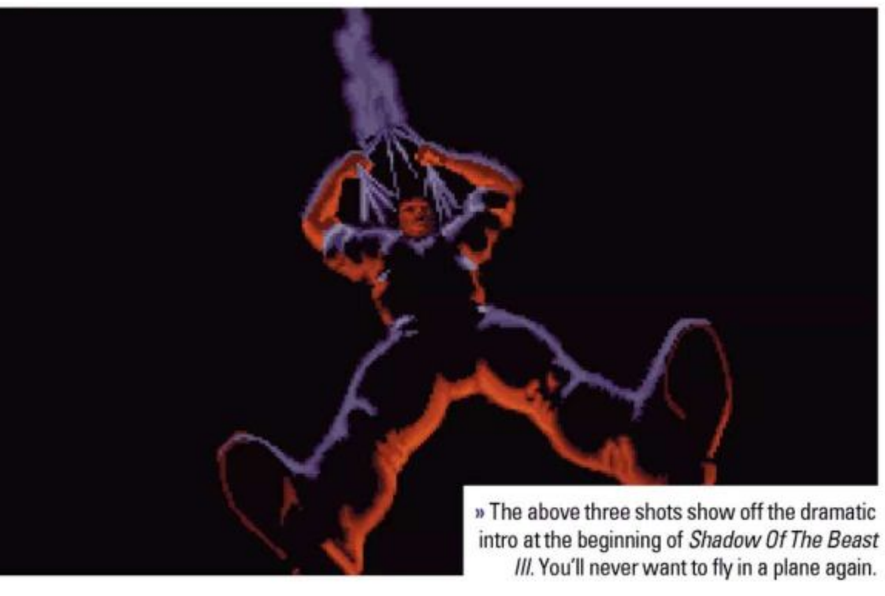
■ DMA Design turned out a truly fantastic port of *Shadow Of The Beast* for the C64. In fact, so brilliant is it that we'd even go as far as to say that it is one of the best-looking games to appear on the system. The game rips by at a great pace and the big, beautiful enemy sprites are faithfully converted, as is the music and parallax scrolling. This is an impressive conversion, and it's actually a little easier than the Amiga original too. Little wonder, then, that it was awarded 86% in *Zzap!64*.

Super Nintendo

■ In a disappointing twist, the one conversion of *Shadow Of The Beast* that actually went about remedying many of the difficulty issues of the original game was never released. Thankfully, some brilliant person went to the trouble of dumping the game ROM on the internet so that fans could experience it. Titled *Super Shadow Of The Beast*, the game is brighter, chippier and basically more 'Super Nintendo' than all other ports, and features remastered levels and the option to tweak the number of continues and difficulty level. Hallelujah!

TurboGrafx-CD

■ Despite producing one of the worst conversions of *Shadow Of The Beast*, Victor Technologies somehow also managed to produce one of the best with this fantastic port for the TurboGrafx-CD. This version is one of the best ports of *Shadow Of The Beast* out there and certainly the preeminent console port, in our opinion. It looks and animates great, and features a resplendent CD-quality score. Even better than that, the speed and reaction time of your hero has been finely tuned too, which makes dispatching enemies much easier and far less frustrating.



» The above three shots show off the dramatic intro at the beginning of *Shadow Of The Beast III*. You'll never want to fly in a plane again.

» The sequel was much darker in tone than the first game, as this unsettling introduction sequence ably demonstrated.

a step in the right direction for the series, and this was reflected in the significantly more positive review scores that the sequel received.

Shadow Of The Beast III

Playing the third *Beast*, it's clear that Reflections had been listening to feedback to deliver fans a memorable final hurrah for the series – one that not only looked and sounded great, but also played the part too. Shadow Of The Beast III shares very few similarities with its Marmitey predecessors, almost feeling like its own game in some respects.

Rather than taking place over one gargantuan world, the game is divided into four distinct levels, each uniquely themed and featuring imaginative, tricky but perfectly solvable puzzles – although many were once again one-chance affairs. Each stage now ended with a boss fight against the series' recurring villain, Maletoth, and featured handy respawn points, which, for the large portion of presumably now-balding fans of the series, was a bit like receiving manna from heaven.

The visuals and music, which saw Tim Wright return to scoring duties, were also as good as ever, and although the graphics obviously didn't quite have the same impact as the first two games, given that graphical standards had come on significantly in the three years between the release of *Beast I* and *III*, in terms of enemies and level design *Shadow Of The Beast III* is the most imaginative and varied of all the three titles. So did this new approach make working on the third game any more exciting?

"If I'm honest, it was less exciting than the first," Martin responds. "*Beast I* was our first dedicated Amiga game, it was earlier in the machine's life, and it was really pushing the graphics hardware to the limit. When you get used to a machine and what it can do, some of the magic fades and you're starting to think about what new machine is around the corner!"

Although these improvements were welcome, some were left cold by the changes. With the series now using a typical videogame paradigm of individual levels and boss fights, and the process repeating until the end credits, some felt that *Beast III* was less immersive and that it lost a little of its atmospheric magic.

With just four stages and half a dozen puzzles to crack in each, *Beast III* was much shorter than the previous games. In fairness, though, this was pretty much the game's only real imperfection. Reflections had done a first-rate job in ending the *Beast* series on a high, and was rewarded with complimentary reviews. However, despite better games and a larger Amiga installed base, the sequels were hit hard by piracy and never got close to reaching the lofty sales of the original. And so it was time for Reflections to look to other games and other machines.

Fondly remembered more for its graphics and music than anything else, the *Beast* series is an odd trilogy of games but one that many Amiga owners hold dear to their hearts. So why does Martin think the series still strikes a chord with many gamers today?

"Partly because it came right out of nowhere, without a long-winded hype build-up. Partly because of the huge box, the Roger Dean artwork and T-shirt, and the feeling of substance that came with all of that. I also think people probably appreciated that we and Psygnosis took a bit of a risk in making a game on a pretty niche at the time machine that was impossible to replicate effectively on any other hardware system of the time. Yes, it ended up being ported to many others in the end, but almost all of them were so compromised due to the lack of the Amiga's hardware tricks. And finally, perhaps if you had a Commodore Amiga and were tired of lazy Atari ST ports to your machine and had been waiting for something to really show off what it could do – and make any Atari ST-owning friends turn very quiet in the process – then *Beast* did that."

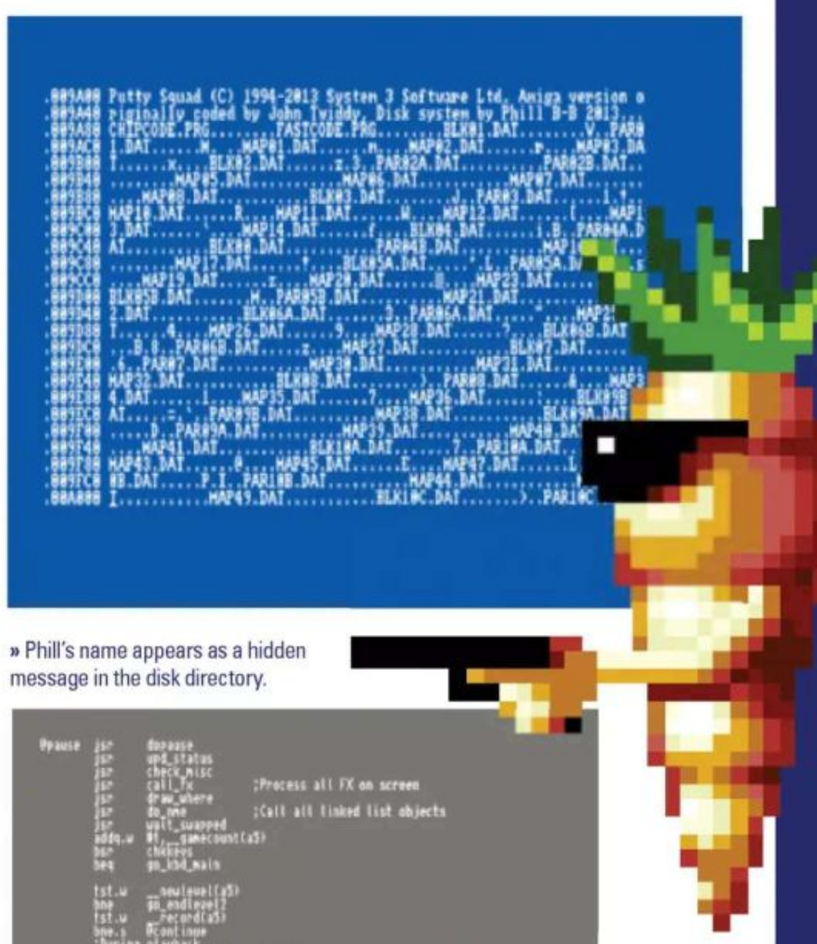
We finish our time by asking Martin something we're sure all fans want to know: has Reflections ever considered returning to the series, and does he think there's still a place for the game in today's market?

"It's a nice thought, and I do get asked about it regularly, but I think we would have to beat something like *God Of War* now. Not a prospect I would relish! A simple scroller wouldn't cut the mustard these days with anyone but hardcore fans of the original." He could well be right as the PS4 reboot that was announced last year is still nowhere to be seen…

RESURRECTING PUTTY SQUAD

Christmas is a time for miracles, but this one was 19 years in the making. Darran Jones speaks to those responsible for resurrecting System 3's Putty Squad

» [Amiga] The graphics in *Putty Squad* are really impressive, showing just what the 1200 is capable of when pushed.



» Phill's name appears as a hidden message in the disk directory.

```
@pause  jsr     dprause
        jsr     vbl_status
        jsr     check_misc
        jsr     call_fx         ;Process all FX on screen
        jsr     draw_where
        jsr     do_vmo          ;Call all linked list objects
        jsr     wait_swapped
        addq.w  #1,__gamecount(a5)
        bsr     chkkeys
        beq     go_kbd_main

        tst.w   __newlevel(a5)
        bne     go_endlevel2
        tst.w   __record(a5)
        bne.s   @continue
        ;During playback
        ;Check for terminating end of demo sequence
        move.l  __record_ptr(a5),a0
        tst.w   (a0)
        beq     stop_replay
        bsr     read_joy
        btst    #bj_fire,d0
        beq     stop_replay
;Has player died yet
@continue       tst.w   __dead(a5)
        beq     loop
        move.w  #-1,__stopclock(a5)
        bsr     reset_stkfrm
        ;If you die during playback, stop immediately
        tst.w   __record(a5)
        beq     stop_replay
```

» Here's an example of some of the source code found in Putty Squad.

IN THE KNOW

» **PUBLISHER:** SYSTEM 3

» **DEVELOPER:** JOHN TWIDDY

» **RELEASED:** 2013

» **PLATFORM:** AMIGA 1200

» **GENRE:** PLATFORMER

Few Amiga owners will forget 24 December 2013 for it was the day that the impossible happened. Some 19 years after its original release date, the Amiga 1200 version of *Putty Squad* was finally released. For many Amiga owners it was nothing short of a Christmas miracle.

So why on earth would an ancient computer game get published nearly two decades after its original release? To begin this answer we'll need to go back to issue 64 of Retro Gamer when we interviewed System 3's John Twiddy about his impressive career. John revealed to us that he had not only converted the Amiga version of *Putty Squad* to PC, but more importantly, that he still had the original code at home somewhere. Needless to say the Amiga community became very excited.

Of course, if you go back and read the Amiga magazines of 1994, the excitement surrounding *Putty Squad* becomes a lot more obvious. *Putty Squad* was set to be the last big hurrah for System 3 on Commodore's 32-bit machine, and the reviews for it were very good indeed. The excitement was further fuelled by the release of a seven-level demo with issue 41 of *Amiga Power*, which gave a further indication of the greatness that was to come.

"I played the demo back in 1994 I think it was, and thought it was a quite polished game," recalls Amiga community member Phill Boag-Butcher, who is mainly responsible for *Putty Squad*'s miraculous return. "In all honesty, I preferred the graphical style of the original *Putty*, but certainly I preferred the gameplay mechanics of *Putty Squad*. I was looking forward to its release."

The release didn't come however, and Phill joined thousands of other Amiga owners in wondering about *Putty Squad*'s abrupt cancellation. "I was utterly mystified to be honest," he continues. "For sure the Sony PlayStation had a massive effect on not only the Amiga, but the SNES and Mega Drive, but other software companies were still releasing some big name titles [from] 1994 to 1997. *Putty Squad* would have fit right in with what was being released at the time, and would have been a desperately needed title for owners of A1200 Amigas, because there was precious little that actually utilised AGA machines in a way that some of the elements of *Putty Squad* did."

For many games that would have been the end of the road, but *Putty Squad*'s adventure was far from finished. In fact, it was just getting started…

In 2010, System 3 revealed it would be releasing a new *Putty Squad* on PlayStation Vita, which instantly reminded Amiga owners of their missing game. After the console's launch came and went the Vita game was assumed to be in development hell. It hadn't been forgotten though, and in 2013 System 3 revealed via Retro Gamer that not only would its game be appearing on Vita, it would also be released on other systems as well, including the Wii U and PS4. Even more amazingly, Mark Cale revealed that System 3 was planning to bring back the original Amiga game on a 3.5 floppy disk that would be sold with limited editions of the game.

The Amiga community went berserk, but then, just a few short weeks later, Mark Cale revealed in an interview with Eurogamer that despite their best attempts the game wouldn't be manufactured after all. It led to a furious ▶

» [Amiga] Interested in playing System 3's missing game? Head to **www.system3.com/promotional-download/puttysquadamiga/**

UNDER WRAPS

The secret you just can't share

Non-disclosure agreements are common in today's game industry, but it's rare to see them in force for a 19-year-old game. That's what happened with *Putty Squad* though, as Mark and John needed to know that Phill could weave his magic before their intentions were revealed to the Amiga community. "I have to admit it was frustrating to read some of the negative comments about it not being available as a pre-order game giveaway with other formats, especially as a number of the fans did not know we were working on a digital solution," sighs Mark about the continued barrage of insults that were continuing while Phill and a small part of the Amiga community worked on the game.

"Some even doubted that the game ever existed on the Amiga and thought it was all one big PR spin about a game that never existed except on some old cover mounts," he continues. "Hopefully now that the game is out there, people will appreciate the effort we put in to giving this to them for Christmas as a gift for all the support and passion they showed for this game for nearly 20 years. More importantly I hope people really appreciate the hard work that Phill did to make this happen and the support that John gave him."

> **"The community came back and suggested we create an ADF image"**
>
> Mark Cale

assault on both Mark Cale and System 3, with many assuming the news had been nothing more than a publicity stunt to fuel interest in the new game. Something that Mark insists simply wasn't correct…

"When we first looked at the idea of releasing a disk version of *Putty Squad* for the Amiga, we were surprised by how expensive it would have been to create a two-disk product. Because it is no longer a common format we were getting prices of £3 per disk and it was looking like it would be across three disks initially," explains Mark about the reason the idea was ultimately dropped – much to the dismay of excited fans. "It would have been great to see the game back in the chart 20 years on if we had been able to give it away as part of a pre-order campaign, but it just was not possible."

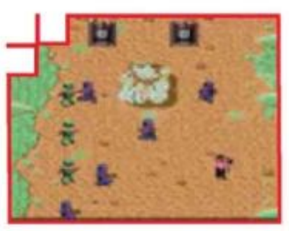
Phill has his own thoughts on the very public backlash that System 3 faced. "Without wanting to direct too much criticism toward System 3, I think they and other software companies and developers utterly underestimate the goodwill that the Amiga still generates with people," he begins. "There's still a massive amount of people that own the real hardware, there's a hell of a lot of people that are properly into their Amiga emulation, and WinUAE is massively supported by Toni Wilen who is incredible at updating and making WinUAE more like a real Amiga everyday. Put simply, there's still a hell of a lot of people out there that still use Amiga related hardware/software and have long memories." Unsurprisingly Phill wasn't surprised when things turned sour. "All of a sudden this 'niche community' got quite vocal about it and it became apparent very quickly that this was publicity of the kind that System 3 didn't need or want, that their actual good intentions to release were now being, in my opinion, turned into a PR disaster."

By now Phill decided it was time to contact System 3 and find out what exactly was going on. He originally wrote an angry letter, convinced the company had been lying about the code and hoping to disprove Mark Cale on the EAB (English Amiga Board) forum. After logically thinking things through he changed tack, offering to not only take care of the Amiga mastering of *Putty Squad*, but more importantly, offering the service free of charge. It got the desired effect and he received a positive response.

"Initially I wasn't going to be doing *Putty Squad*," he reveals to us. "Mark and John were frankly inundated with requests to help in getting the game released, but having spoken to John about it, the tone of my letter that spelt out in no uncertain terms that not only had I done this rescue for a previous software company (Gremlin Interactive), I could do so again – my Amiga experience was still fresh and I could do this without any problems."

Mark is also grateful that the email arrived, as it suddenly gave System 3 a solution. "We are aware that System 3 has a lot of fans of the games we have produced over the years and it is nice to be able to reward peoples' loyalty in some way," he begins. "So we looked at other ways to offer *Putty Squad* to the fans. The community came back and suggested we create an ADF image of the game and let it be downloaded that way. This was the perfect solution and so we set out to get the game ready to be remastered to allow it to be downloaded as an ADF image."

Still, it would still take more than good intentions on behalf of System 3 and Phill to bring *Putty Squad* to the masses however, as there were numerous issues that needed to be ironed out first. Some of those problems



DEVELOPER HIGHLIGHTS

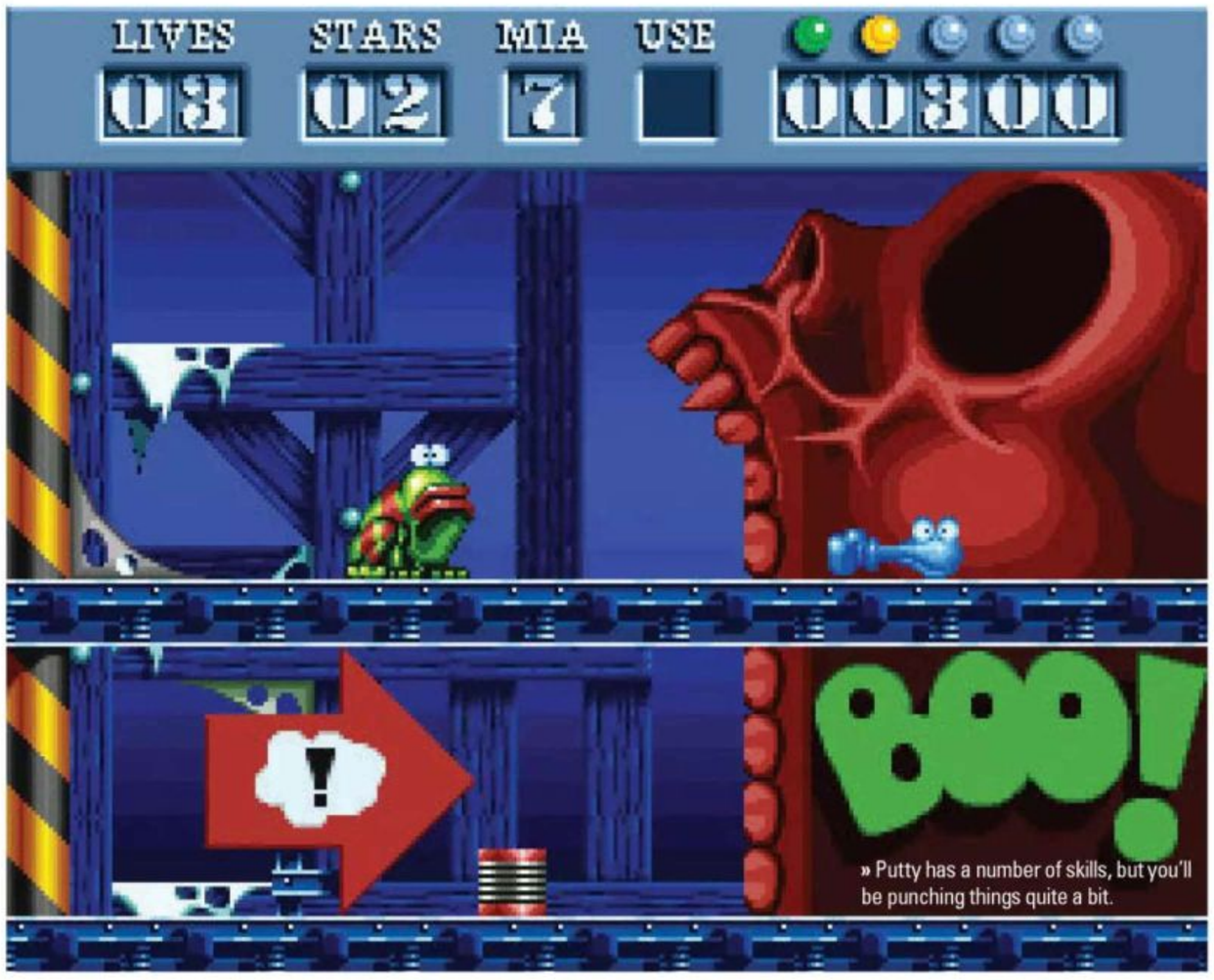
THE LAST NINJA
SYSTEM: VARIOUS
YEAR: 1987

IKARI WARRIORS
(PICTURED)
SYSTEM: C64
YEAR: 1988

COOL SPOT
SYSTEM: AMIGA
YEAR: 1993

» (Left) Save enough putties and you'll unlock the next exit.

» (Right) There's an impressive amount of variety in *Putty Squad* and you'll traverse all kinds of exotic locations during the course of the game.



» Putty has a number of skills, but you'll be punching things quite a bit.

resolved around cracking *Putty Squad*'s copy protection. Fortunately, Phill's 'colourful' past helped ensure that he was highly qualified for what was needed. "I also go by the moniker of Galahad, and have been a member of some rather questionable organisations with not entirely honourable intentions, one of the most famous of which is Fairlight, which started life on the C64, progressed to the Amiga, PC, SNES and Mega Drive," he explains. "However, having the very skills of being able to remove copy protection is exactly what was required to remaster *Putty Squad*, and without wanting to give too much away, I might have been intimately aware of the copy protection system that John Twiddy employed on most of his Amiga titles, and knew how it worked and was implemented… and that might have been useful!"

Those hacking skills turned out to be very useful, and before long Phill was hard at work on remastering *Putty Squad*. Surprisingly, Phill's communication with System 3 and original developer John Twiddy was actually quite minimal. "System 3 pretty much left me to get on with it once I'd proven to John that I knew what I was doing," he continues. "I decided to keep John in constant touch with what I was doing with regular email correspondence, so he would know they hadn't just passed on their baby to an idiot who talked a lot but couldn't actually do anything! I think John was reassured after a couple of emails, it was obvious to him that I understood various parts of his code, the problems in mastering it, having to junk all of his disk system and the reasons why, and he was fairly happy at the progress I was making." That progress was important as well because Mark Cale was determined that *Putty Squad* would be made available on Christmas Eve, the ultimate goodwill gesture to the community who had previously slated him and System 3 a few short months before. Phill was equally adamant about the strict deadline, wanting to make Mark's wish a reality.

There were obviously issues working with 20-year-old code however, and Phill certainly had his hands full – particularly when it came to the PsyQ system that *Putty Squad* employed. Phill explained that it was a cross-development system developed by Psygnosis for other games developers and that it was used for a variety of other consoles and computers including the SNES, Mega Drive and Saturn. "It's a similar system to PDS and SNASM whereby all the development of, say, an Amiga game is done on a PC," he continues. "It's not that the Amiga isn't capable of being a development machine (some game devs used Amigas to cross-develop for some console titles), but if the game you're writing opts to crash, it'll take the whole machine with it, which could potentially ruin a project as some crashes can wipe out source code and damage disks."

As a result of this instability, developers would typically program and assemble source code on a PC, using an interface cable/card between the PC and Amiga once the game was ready for playtesting. "The PsyQ system is part-hardware and takes over the Amiga to allow downloading of the game to the Amiga from the PC," continues Phill. "It then activates the game on the Amiga for playtesting. PsyQ can interrupt the Amiga and stop the game – it just makes development easier and faster. When you consider that when the A500 was first released, hard drives for them were expensive and not very big, whereas PC's hard drives were the norm and a lot cheaper and bigger, and generally the PC could assemble source code into 68000 machine code faster

MORE MISSING AMIGA GEMS

Putty Squad isn't the only Amiga game to go missing in action…

SNOW BROS

STATUS: RELEASED

■ This stunning conversion was by Ocean France and was coded by Pierre Adane. Pierre was responsible for the excellent Amiga conversion of *Pang*, and *Snow Bros* is equally impressive, featuring stunningly accurate levels, brilliant animation and super-tight gameplay. The Amiga version was discovered in 2006 and Denis Lechevalier (DLFRSilver) was involved with its release.

LIQUID KIDS

STATUS: RELEASED

■ This delightful platformer by Taito is another Ocean France Amiga game that never saw the light of day. An English Amiga Board member called The Wolf tracked down the original code in 2003 and it's now available to play. Coded by Michel Janicki and Pierre-Eric Loriaux, with graphics by Thierry Levastre, it's another solid platformer. It's not quite up to the standard of *Snow Bros*, but it remains a very competent conversion.

GORE

STATUS: UNRELEASED

■ Unlike several games covered here, *Gore* was never released; in fact it's unlikely that it was even finished. So why is it spoken about in such revered tones within the Amiga community? Simple; it was the brainchild of DMA's Dave Jones, who had released popular shooters *Blood Money* and *Menace* and would go on to mastermind *Grand Theft Auto*. Originally planned as a technically impressive scrolling beat-'em-up, *Gore* was eventually scrapped in favour of *Lemmings*.

HOSTILE BREED

STATUS: RELEASED

■ *Hostile Breed* was another game that received positive reviews back in the day – 66 to 84 per cent across seven magazines – but never received an actual release. Fortunately, programmer Rob Stevens had kept hold of the Amiga floppy disks and it was eventually released into the Amiga community after Amiga Games That Weren't contacted him. An interesting take on the shoot-'em-up genre.

SON SHU-SHI

STATUS: RELEASED

■ *Son Shu-Shi* started off on the Atari ST. The original authors of the cancelled Amiga port revealed to *Amiga Point Of View* fanzine that the source code and binaries had been destroyed. Luckily Patrick Tamine, who had been helping out on the game, read the news and came to the rescue with the two-disk runtime version he still owned. Several people in the community (including Ian) ensured a WHDLoad version was made available.

AN INTERVIEW WITH JOHN TWIDDY

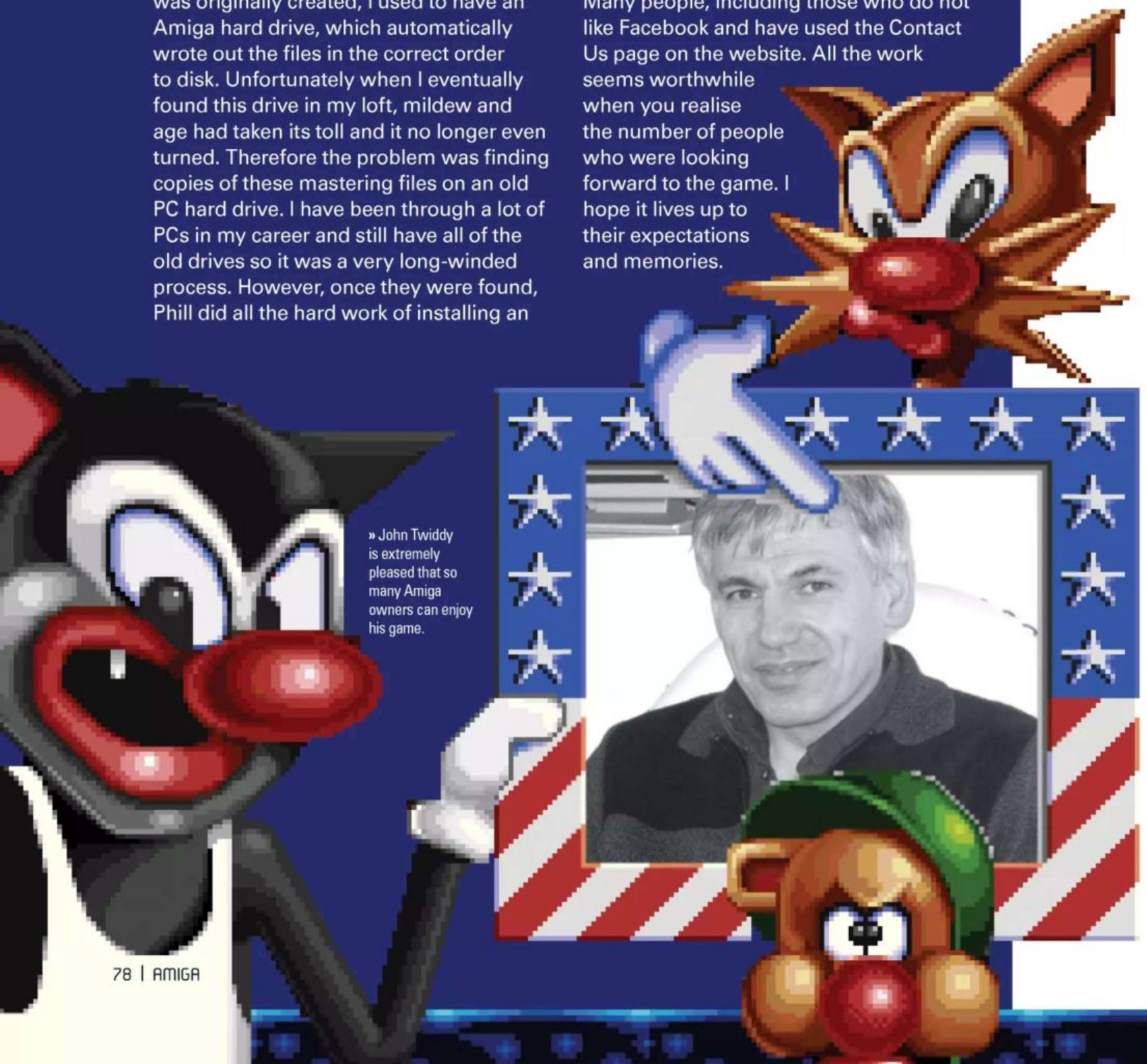
We were keen to find out how Putty Squad's original developer felt about the long-overdue release

What's it like seeing Amiga *Putty Squad* in action after all this time?
It is great to see it up and running again. It was a bit of a shock looking at the low resolution compared with what we have become used to on modern consoles. I also found it quite difficult to get used to the old controls. Nowadays we are used to having so many buttons and controls on a joystick whereas, in those days, it was a matter of crow-barring all the functionality into a single button. It made me realise just how many aspects of the original game have slowly been changed over the past year in the new incarnations.

How much work have you had to do with the project?
Most of my involvement was involved in finding the files in the first place. Ever since the game was first written I had the source code and original data files, but in recent months we were desperately searching old hard drives to find the actual mastering files. When the game was originally created, I used to have an Amiga hard drive, which automatically wrote out the files in the correct order to disk. Unfortunately when I eventually found this drive in my loft, mildew and age had taken its toll and it no longer even turned. Therefore the problem was finding copies of these mastering files on an old PC hard drive. I have been through a lot of PCs in my career and still have all of the old drives so it was a very long-winded process. However, once they were found, Phill did all the hard work of installing an alternative disk system and loader to read/write them to disk.

How does the mastering process of today compare to the Amiga days?
I have to confess to being ignorant of where the Amiga community had moved on to nowadays. And whilst I have become aware of some elements from speaking to Phill, I can't admit to being in the know even now. I have to say I did used to like the simplicity of working with the Amiga system in the old days.

How do you hope people will respond to the release?
We were very keen to keep the game as it was originally intended and therefore hope that people will enjoy the original style of gameplay. We are very aware that tastes, styles and expectations have changed over the past 20 years. However, I have been blown away by the hundreds of people who have bothered to take the time to thank us for giving the game away. Many people, including those who do not like Facebook and have used the Contact Us page on the website. All the work seems worthwhile when you realise the number of people who were looking forward to the game. I hope it lives up to their expectations and memories.



» John Twiddy is extremely pleased that so many Amiga owners can enjoy his game.

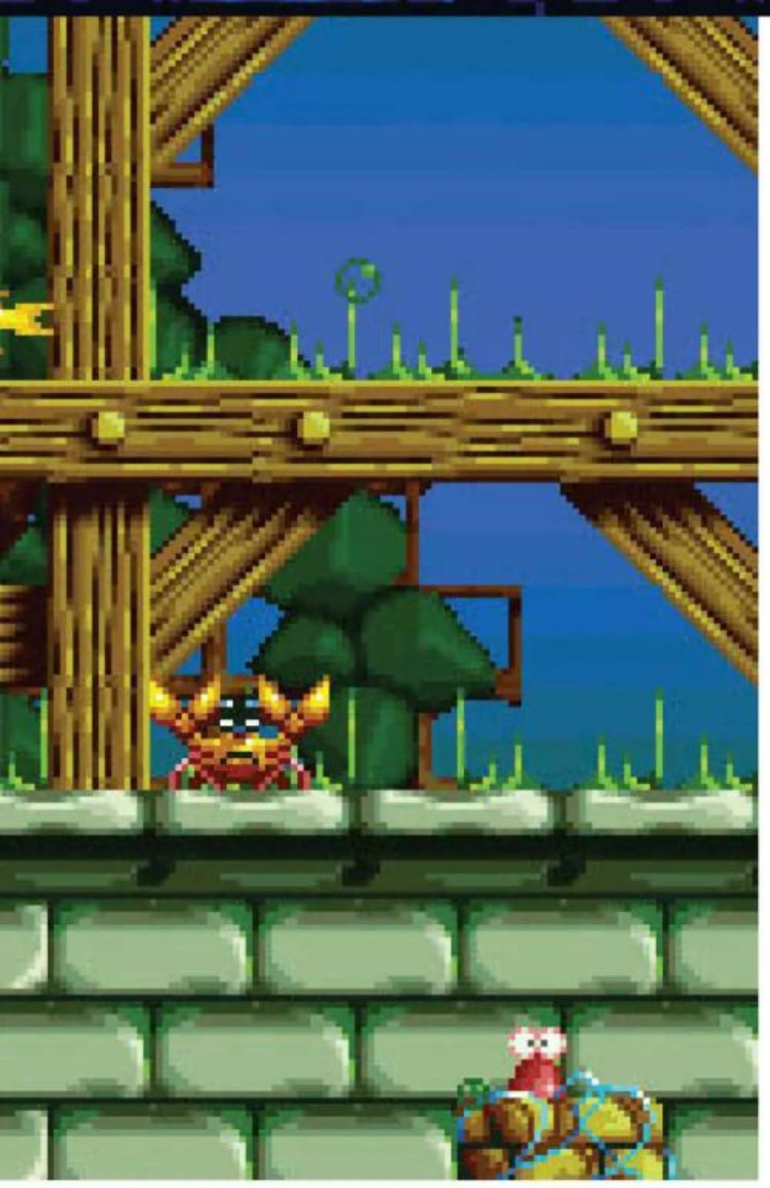
» Later levels get incredibly hard, so you'll need all your putty skills to survive.

than the Amiga could. Lots of development teams used these systems, some used custom-made setups, others simply did development on the target machine, and others did it all from floppy disk drives which just sounds mental now!"

There were more issues buried within the 20-year-old code that John Twiddy had first created two decades previously, and *Putty Squad* was proving itself to be time-consuming work. Luckily, Phill was equally up to the task, revealing that getting rid of all the hard-coded debug information was certainly a tricky job, but not an impossible one. "When John made his final assembly, there were *lots* of in-game functions that could be accessed for debugging purposes, which clearly could not be left in the game," he explains. "Some of John's equate functions didn't cover all of the debugging code, so it wasn't just a case of clearing a few address locations to switch off these debugging features; they had to be manually removed, which then caused other parts of the game that were essential to not work. It wasn't much of an obstacle, but John put *lots* of debugging stuff in there so I had lots of functions to remove and do it so it didn't affect the game."

Unfortunately for Phill it wasn't just a case of sorting out the PsyQ system and the rest of *Putty Squad*'s source code, as System 3 was adamant that the game had to be compatible for anyone who wanted to play it on a base Amiga 1200. The only problem was that Phill lacked a machine and lacked the time to create the relevant hard drive installer that was needed. Step forward Ian Lightbody of the popular Amiga fansite Codetapper.com, who was aware of *Putty Squad*'s resurrection and had the required computer.

"It was absolutely vital to test the game on a physical Amiga 1200 because emulators



> **"It was absolutely vital to test the game on a physical Amiga 1200"**
> Ian Lightbody

have so many options to increase the speed and power beyond what the real hardware can do," explains Ian of the need to test the game on native hardware. "The Amiga relies on exact timing in many areas, and the WinUAE emulator can be more forgiving to software that doesn't quite follow the rules."

Ian set to work with his playtesting and immediately ran into his first problem. The game didn't seem to be loading, despite not showing the usual error message that would appear, leading Ian to believe that the disk was actually faulty and had bad sectors. "Most of the popular disk writing programs on the Amiga write to the disk without checking it was successful, and if the disk makes all the normal sounds then there's no real reason to suspect anything was wrong," explains Ian. "I began to suspect the disk was faulty, and tried about 40 different floppies before I found one without errors and successfully wrote the game back to disk. I informed a very happy Galahad that it had loaded perfectly on all configurations, despite the five-minute task taking the best part of an hour!"

Realising that many other users would be in the same boat, Ian modified his disk writing software so that it included a verify option, while Phill added instructions about fresh disks and using write verification. Ian wasn't finished however, as he needed to create a hardware installer, which was a critical part of the process. Fortunately, it was pretty straightforward, partly due to Phill designing his code so that it simplified the process and also because *Putty Squad* was extremely similar in structure to the original seven-level demo, which Ian had already written an installer for.

"The first task was to extract all the data off the two disks, and that took several iterations before we were happy with it," reveals Ian about the time-consuming process. "We found a couple of bugs in the disk ripping software and managed to work around them while still making the file extraction process as fast as possible. I was actually able to begin work on the hard drive version before the second disk had even been mastered, as Galahad told me in advance about his (cunning) plan for storing the files on the second disk without it requiring its own directory structure."

After a couple of weeks of hard, secretive work under NDAs, *Putty Squad* made its Christmas Eve deadline and was released to ecstatic fans. It's been a difficult journey for the people involved, but ultimately Mark Cale feels it was all worth it. "I hope that people appreciate that all along we wanted to be able to make it available in one form or another," explains Mark, who refers to the last couple of months as "a rollercoaster". "John always maintained that he had the files somewhere, but it was a bit of a blow when it turned out to be more work than we realised to get it to work. It all came together though, and we gave the community what they wanted and released the Amiga game for free for Christmas. We could have charged for it but I felt that was the wrong way to reward people's passion and love for the game they played so long ago as a demo. Some people call *Putty Squad* the Holy Grail of gaming; the ultimate rare game, and we were determined that they would finally get to experience it. I hope that the release of *Putty Squad* shows that System 3 does care about the Amiga community and that we tried to give something back. More importantly, I feel it shows that we all have the same thing in common – a passion for great games."

Special thanks to System 3 and the members of the Amiga community who all helped with *Putty Squad*'s Amiga release. Additional thanks to Adrian Simpson of Amiga Lore and Mike Dailly for their help.

» [PS Vita] *Putty Squad* is already out on PS4 and will be on Vita, Wii U and other formats.

» Later levels have deadly drops, so items like this balloon become incredibly useful.

Supremacy: Your Will Be Done

THIS GALAXY AIN'T BIG ENOUGH FOR THE BOTH OF US...

» AMIGA
» PROBE SOFTWARE
» 1990

When I talk to younger friends about gaming, one of the things they tend to struggle with is the concept that players could be drawn into an experience which suggested more than it showed, due to the use of text-based or menu-driven interfaces with fairly minimal visuals. However, anyone that has logged enough time in front of the *Football Manager* games knows that this is entirely possible – and in the strategy world, *Supremacy* is a game that manages to draw a similar level of involvement from its players.

The game's premise of interplanetary conquest is simple enough, with the goal being to colonise a succession of planets, in direct opposition to a foe who is attempting the same. You never see a great deal of the actual action, with small but perfectly informative animations depicting events such as the terraforming of a planet and the training of your troops, and there's also very little sound to be heard.

If you want to track where the real atmosphere of *Supremacy* comes from, you have to look to the real-time text stream. While it initially appears to be fairly unexciting, the text box is where you'll receive news and where you'll be subjected to angry declarations of intent by your rivals in galactic conquest. Before long, you'll be going about your business not simply in order to win, but also in order to annoy the CPU player. And let's be honest – if you're trying to deliberately annoy a fictional entity, you've probably been drawn into the game. *

CINEMA

FROM KNIGHTS TO MOBSTERS, WORLD WAR I FLYING ACES, THE IMAGINATIVE SOFTWARE CAPTIVATED A GENERATION. MIKE EMPLOYEES TO DISCOVER THE TALE OF A TRUE

To readers of a certain age the name Cinemaware will evoke cherished memories of storming castles, battling giant ants or soaring into the air to fight Nazis. The company's distinctive releases, beginning with *Defender Of The Crown*, showcased the graphic power of a new generation of home computers, particularly Commodore's Amiga. And the stories they told were timeless cinematic archetypes – historical epics, silent comedies, Fifties sci-fi monster movies or Saturday morning matinee-serials with broad-jawed rocket-pack wearing heroes.

"Several of us were raised as gamers on the Amiga, coming from computers like the C64 and Apple II," says Darren Falcus, development director of the modern incarnation of the celebrated company. "Cinemaware, along with maybe LucasArts and Psygnosis, was the leading developer of the time. Its games were cutting-edge in terms of graphics and presentation, but it was in its unique combination of storytelling, gameplay and cinematic sequences that it truly stood out. Cinemaware coined the term 'Interactive Movie', which was inscribed on its game boxes way back in the mid-Eighties, a decade before the term was appropriated by the FMV games from the early Nineties. For those that remember, Cinemaware truly was the Square or Blizzard of its time."

It was the possibilities of working with the new Amiga graphics hardware that drew renowned computer artist Jim Sachs to work on its famous debut. "I had been talking to Aegis Development about doing some projects with them, and one of their partners was Bob Jacob," remembers Jim. "He was forming Cinemaware with game designer Kellyn Beeck, and wanted to recruit me as their Art Director. The three of us flew to Amiga headquarters in Los Gatos to touch bases with the brilliant inventors of that machine and talk about Kellyn's ideas for *Defender Of The Crown*. I was intrigued, and figured I could come up with some great visuals for it. The Amiga was vital to the game, because I would not have been interested in doing it on a lesser machine. *Defender* would have had a very different look if someone else had done the graphics, and Cinemaware might have had a different start."

AWARE

ARABIAN NIGHTS AND BUXOM MEDIEVAL PRINCESSES, CINEMAWARE'S BEVAN TALKS TO PRODUCER JOHN CUTTER AND OTHER PAST GREAT OF THE GOLDEN AGE OF VIDEOGAMES

"Bob had worked in Hollywood for a while and he was kind of a stereotype of a Hollywood agent," recalls John Cutter, Cinemaware's original producer and the company's first full-time employee. "I got my first job in the industry at a company in Santa Barbara called Gamestar. After a couple of years it was bought out by Activision and I lost my job. While trying to figure out what to do next I received a phone call from Bob. He told me he was starting a revolutionary new company and wanted me to be the first employee. I was sceptical. Bob claimed to be working with some really talented contractors on several amazing new games, including a title he named *Defender Of The Crown*.

"We arrived at Cinemaware, which was in a little office park near Thousand Oaks, and Bob took us back to a kind of testing lab where he had an Amiga computer set up. My wife was sort of scowling the whole time, but we were pleased to see that there was an actual office! Bob turned out the lights and loaded up *Defender Of The Crown*. When that amazing title screen appeared my mouth popped open, and when light swept across the metallic lettering my jaw dropped to the floor. Without a second's hesitation my wife leaned over to me and whispered, 'Take the job!'"

"The company was run by Bob and his wife Phyllis," explains John. "They were working with a number of contractors at remote locations and needed someone to help run the office for them. I became a producer and was eventually given the role of director of product development. When I joined the company it already had several games in development: *Defender Of The Crown*, *Sinbad And The Throne Of The Falcon*, and *The King Of Chicago*. I helped finish those games, including a complete rewrite of *Defender* at the last possible minute by RJ Mical."

"The Amiga version of *Defender* was so well-reviewed that it was a must-have game for everybody with the machine," recalls artist Jeff Hilbers, who worked on several Cinemaware games including *King Of Chicago*, *Rocket Ranger* and *Wings*. "But the sales could never get much bigger than 30 or 40 thousand and to be able to sell the game on the Commodore 64 promised to make a whole lot more. That was really Bob's strategy – to build audience reputation and recognition on ▶

the Amiga, then create a degraded version on the C64 that would really pull the money in." It was a strategy that worked, at least as far as the company's debut was concerned, with Jim Sach's head-turning artwork wowing everyone who saw it. *Defender Of The Crown*'s mix of stunning presentation, strategy and romance was unique and very different from anything else on the market. "After the success of *Defender*, Bob, Phyllis and I went and got company cars," chuckles John. "They got BMWs and I picked out a new Mazda RX-7…"

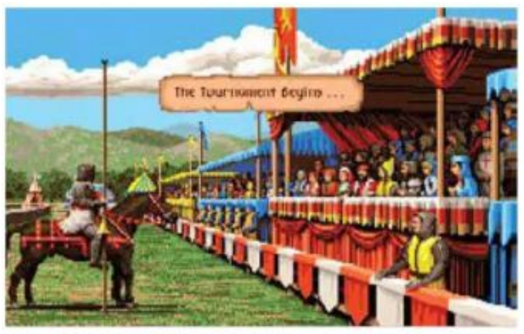
Bob Jacob's Hollywood experience was a major factor in inspiring many of Cinemaware's games, from *Defender Of The Crown*'s sumptuous Ivanhoe-like setting onwards. "Bob was a huge fan of movie serials, so almost all of our titles were inspired by classic cinema," says John. "*King Of The Rocket Men* and *Commander Cody* inspired *Rocket Ranger*, which was designed by Kellyn Beeck and produced by me. Films like *Them* and *Tarantula* lead to *It Came From The Desert*, which David Riordan designed and produced. *Wings* was inspired by an old black and white film by the same title, among others, and also by a ton of research I did in the Thousand Oaks library after the project got unexpectedly dropped in my lap."

Top-tier graphic artists from Jim Sachs to Rob Landeros and Jeff Hilbers contributed state-of-the-art visuals for all of Cinemaware's games, with the exception of the Amiga version of *Sinbad And The Throne Of The Falcon*, although an enhanced Atari ST and PC version was later released. "For a while, we had the best art and presentation in the business," comments John. "After the success of *Defender* we went out and hired real artists and trained them how to use computers. That wasn't really done at the time. The artists used storyboards and even a kind of animatic for some scenes. Deluxe Paint (we just called it 'dee paint') was used extensively at Cinemaware, and the work was quite labour-intensive. I remember Jim Sachs telling me that, prior to his work at Cinemaware, he used to create C64 art by plotting out each colour and pixel on pieces of graph paper. Jim was one of the few people I've met in this industry that I can legitimately call a genius. He was a talented artist *and* he understood the medium."

» You never forget the time you come face-to-face with *It Came From The Desert's* giant ants.

"Bob was a huge fan of movies, so almost all of our titles were inspired by classic cinema"

John Cutter



» *Defender Of The Crown* was used to show off the cutting-edge technology of Commodore's Amiga.

Another key element of Cinemaware's games despite the obvious links to the silver screen was, apart from *The Three Stooges*, the originality of its products. Not being tied to a particular licence or existing movie meant the company's designers were free to create completely new gaming experiences, in most cases mixing role-playing, adventure and strategy with superlative sound and graphics. "We never saw much value in licences," notes John. "In those days it just didn't seem cost effective to spend a bunch of money on someone else's intellectual property. Plus, we really didn't want to be limited creatively. That said, our experience working with Moe Howard's estate on *The Three Stooges* was great. His widow came to our offices, which was a really special moment."

» Paying the price in *The King Of Chigaco*.

CINEMAWARE REBORN

Cinemaware was resurrected in 2000, with 'Digitally Remastered' versions of classics like *Defender Of The Crown* and *Wings* being made available for the Game Boy Advance, and a new game, *Robin Hood: Defender Of The Crown*, being released in 2003 for PC, Xbox and PS2. "It is a great responsibility to be able to keep the memory of these classic games and brand alive," reflects community manager Sven Voessing. "Our goal is to bring Cinemaware's style of games to a new generation of gamers and allow fans to enjoy our games on current platforms as well. In 2011 we started getting a team together to focus on new releases, the first of which was an Amiga-emulated version of *Defender Of The Crown* on iOS. Recently, we announced *Rocket Ranger* for iOS and Android, and *The King Of Chicago* will be coming soon for those platforms.

The most recent success for Cinemaware has been a recent HD update of *Wings*, which was funded off the back of a successful Kickstarter. We were keen to find out from Sven why there remains so much love for the classic game. "*Wings* is a powerful game with a dramatic storyline," he tells us. "Storytelling was very rare in the Eighties/early Nineties and in *Wings* you are really central to the story. Many fans tells us that they never skip the story or journal entries because they are so engrossed in the game that they feel the emotions of their pilot. At Cinemaware, we want to keep exploring more of this aspect in our future games."

JIM SACHS ON WHAT HAPPENED TO DEFENDER OF THE CROWN II

"I had totally finished the game, and Commodore shipped a few copies just before shutting down operations. It was heartbreaking for me, because I had put a tremendous amount of effort into it. I always felt that a lot more could have been done with *Defender* if we had the time, and a quick way of loading data. Floppy disks were too slow and caused pauses in the gameplay. I had done the demo disk and user interface for Commodore's CDTV and CD32 machines, so I was familiar with them, and knew that the lightning-fast loading and large capacity of CDs would work great for an expanded version of the game. Cinemaware was already out of business, so I approached Commodore with the idea of a 'Director's Cut'. I changed the gameplay somewhat – the player was now trying to raise money to pay the ransom for King Richard, not trying to gain enough influence to become King himself. Then I wrote narration and hired voice actors to record it in five languages. I added animation and new scenes, and wrote all-new music with a fully-orchestrated cinematic opening. Both Commodore and I were quite satisfied with how the product turned out. Unfortunately, Commodore only lasted a few more days..."

However, towards the end of the Eighties Bob's strategy of clinging to the past with old movie tropes was starting to fail. "I think there are several reasons why we struggled at the end and eventually went bankrupt," John admits. "For one thing, Bob and Phyllis always wanted to make sequels to some of our hit games, especially *Defender Of The Crown*, but I talked them out of it. At the time, game sequels, even movie follow-ups, never performed as well as the originals and most were just cranked out. I didn't want that to happen at Cinemaware. I wanted to come up with creative new ideas, because that's what excited me the most. Although in retrospect, the company might have survived a bit longer if we had capitalised on past successes."

"Another factor was that other companies were stepping up their games. I remember when we fired up *Wing Commander* for the first time, Bob came by and watched us play it and I don't think I've ever seen him look so sad. Chris Roberts did a remarkable job on that title. I got to hang out with Chris at a GDC a few months later and when he found out that I designed *Wings* he kindly made a point to come over and talk to me about it, saying that it helped inspire his game. I'll always remember that moment. Finally, we were late getting the PC version of *TV Sports Football* done and that hurt us. The final nail in our coffin was the board of directors at Electronic Arts. Trip Hawkins, the CEO at EA, had negotiated a deal to buy Cinemaware, but at the last minute the board voted the acquisition down. That was the end."

"Bob and I always had a pretty good relationship, but it got a little strained during those final days," confesses John, "and when I learned that he was starting a new company without me I was kind of hurt. When Bob and Phyllis tearfully made their announcement about the company shutting down, Bob walked around the room and said goodbye to everyone. When he got to me he said something like, "And to John Cutter... the Scarecrow..." I was furious! He had never called me the Scarecrow before and I could only imagine that it was a reference to me needing a brain. As we were moving stuff out of the office Phyllis called me over and asked what was wrong. I told her I was angry about Bob's insulting my intelligence... With tears in her eyes she said softly, 'You really are an idiot sometimes. He said that, John, because he's going to miss you most of all.'" Once a movie buff, always a movie buff...

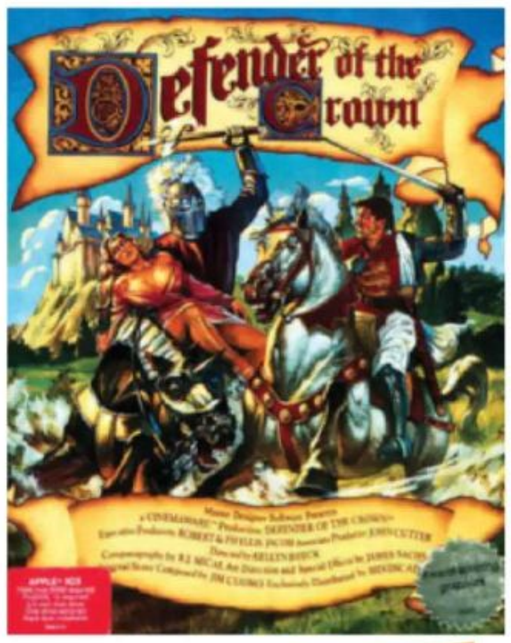
» *Rocket Ranger* was a superb adventure game with varied gameplay mechanics.

» *SDI* took its inspiration from the Cold War that was taking place at the time.

OUR FEATURE PRESENTATIONS

THE GAMES OF THE CLASSIC CINEMAWARE ERA

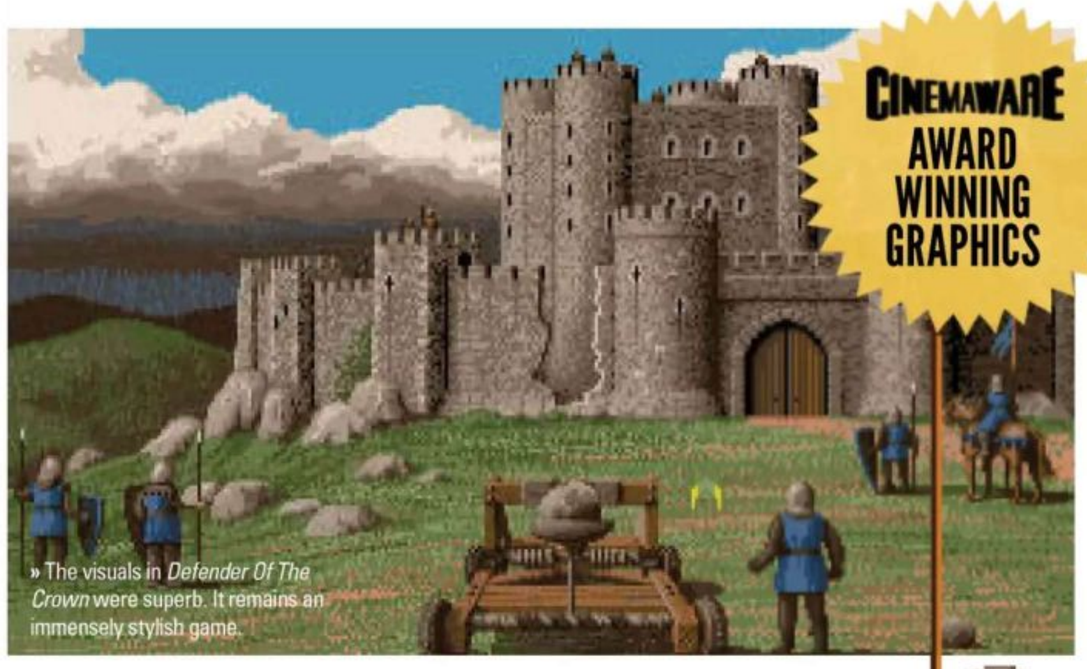
DEFENDER OF THE CROWN



Cinemaware's debut mixed *Risk*-style strategy, played out over a map of medieval Britain, with a number of mini-games – jousting, trebucheting castles and rescuing grateful 'Ladies' with the pointy end of a sword. "Kellyn and I did a fair amount of research into castle design and costumes," says Jim. "We were occasionally at odds with each other, when authenticity would run counter to what I thought people expected to see. For example, castle walls would have been plastered smooth and painted, but most people these days expect them to be bare stone. There were many compromises due to deadlines. I really would have liked to have included a first-person swordfight…"

"Although the art was fantastic, we were having some programming issues," adds John. "With about three months until our deadline, we scrapped all our code and hired legendary programmer RJ Mical to rewrite the game. Kellyn flew to where RJ lived and rented a cheap motel room, but RJ didn't want to be distracted by talking to anyone. So when Kellyn finished any new design documents he would drive over and RJ would tell him to slip everything under the door. I don't think they ever spoke, but RJ pulled off a miracle and finished the game on time."

"Kellyn originally designed *Defender* to play out in real time," John also reveals. "It could have been the first RTS, but we were running into all sorts of bugs so I put on my producer hat and made the last-minute decision to change the game to turn-based. We shipped on time, but I don't know if my decision ultimately helped or hurt the project."



» The visuals in *Defender Of The Crown* were superb. It remains an immensely stylish game.

SCREEN: AMIGA
★★★★★
ALSO SHOWING ON: ATARI ST, APPLE II GS, COMMODORE 64, CD-i, AMSTRAD, PC, GBA, NES, MOBILE

THE KING OF CHICAGO

This Cinemaware title put you into the shoes of a Thirties mob boss on his way up the underworld ladder, attempting to take over the city and dispatch his opponents the good-old Chicago way. "Doug Sharp designed, wrote, and programmed this title for the old black and white Macintosh computer," says John. "It had some really great writing and a very clever dialogue and animation system. We eventually made an Amiga version with all-new art."

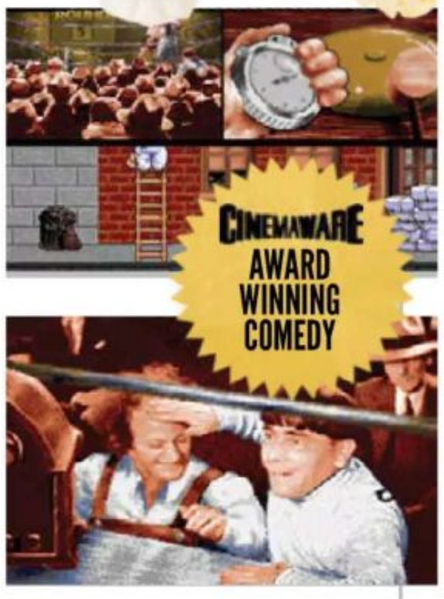
"We had a Mac in the office and it was Rob [Landeros] who decided how he wanted the Amiga version to look," remembers artist Jeff Hilbers, "although the characters all have a kind of Magritte quality, a bit like the *South Park* versions of Ben Affleck and Saddam Hussein!"

SCREEN: AMIGA
★★★★★
ALSO SHOWING ON: APPLE II GS, ATARI ST, MAC, PC, SHARP X68000

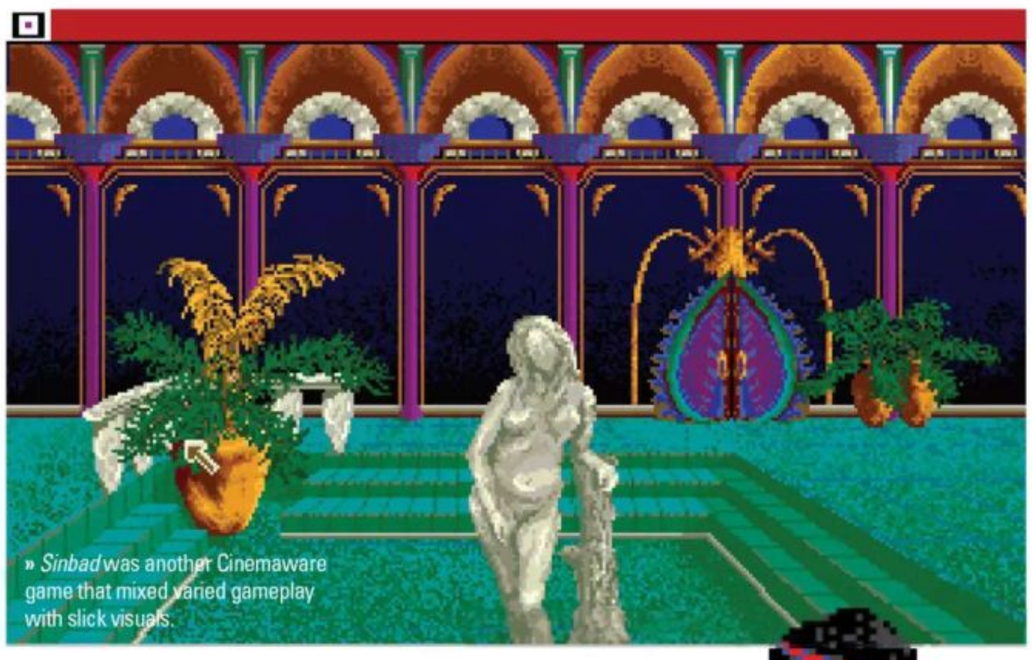
THE THREE STOOGES

With its mini-games, quizzes and eye-pokery, *The Three Stooges* saw Moe, Larry and Curly out to save an orphanage. "We used a group in Chicago called Incredible Technologies to make this game," says John. "I designed and produced it from California."

"The game was a natural application for our digitised speech," says Cinemaware programmer and sound designer Larry Irvin. "The goal was to have a large quantity of speech in the game for a more immersive experience for the players. *The Three Stooges* source material, in digital form, was not available, so going through *The Three Stooges* movies on VHS tape was something I recall doing extensively in order to capture and isolate interesting sequences and classic catchphrases."



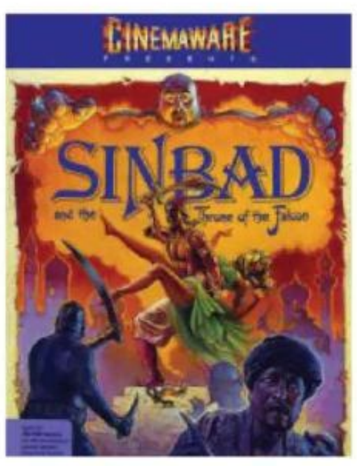
SCREEN: AMIGA
★★★★★
ALSO SHOWING ON: APPLE II GS, COMMODORE 64 PC, NES, GBA, PLAYSTATION



» *Sinbad* was another Cinemaware game that mixed varied gameplay with slick visuals.

» Cinemaware effortlessly captured the spirit of cinematic hits like *Jason And The Argonauts.*

SINBAD AND THE THRONE OF THE FALCON



This action-adventure channelled Arabian intrigue with the spirit of movies like *Jason And The Argonauts* as Sinbad sailed the seas in a quest to rid the realm of an evil Black Prince. "*Sinbad* was designed and programmed by a great guy named Bill Williams who lived somewhere in the Midwest in a geodesic dome," says John. "He was one of the happiest and most upbeat guys I've ever met – I always felt better after talking to him. Unfortunately, when Bob signed the deal he told Bill that he could make *his* game *his* way. Bill really wanted to do everything himself: design, coding, art, sound effects; but his art and animation were not very good relative to the other titles we were making. Bob wanted me to convince Bill to let us redo all the art, but I was never able to change his mind. It was still a pretty good game, but it didn't match *Defender*'s visuals."

"One of the goals in the game is to travel around to various islands and find Ishtiki statues, to recover the gems used for their eyes. I had been playing the game for several months and never really gave that part of the game much thought, but then we hired Kellyn Beeck to help write the manual. He included a really interesting section about the Ishtiki people and how the idols came to exist. Kellyn's history of the Ishtiki worked – when I played the game a few days later I found one of the idols on an island and the hair on the back of my neck went up. That really taught me a lot about the importance of giving players context for important game features."

SCREEN: AMIGA
★ ★ ★ ★ ★
ALSO SHOWING ON: APPLE II GS, COMMODORE 64, PC, NES,
0000000000001987

SDI

SDI was somewhat of a departure from the normal Cinemaware formula, being a 3D space-themed shooter with movie-like interludes and a bit of romance thrown in for good measure. "This game taught me about the importance of having great feedback," comments John. "It was developed in Salt Lake by a group named Sculptured Software and they were using a programmer to create all the art. Midway through development I had our artists redo every screen and animation. A few weeks later we got a new build and it was awesome! Not only had Sculptured put in all the new art, they had tweaked the space combat sequences and made it a lot more fun. When I shot down an enemy ship I was no longer seeing a four frame animation of random pixels, I was seeing a big explosion with ship debris flying out in all directions. It was incredibly satisfying, and thus more fun to play."

"A few weeks before we were about to ship the game I found a practical joke that one of the artists had forgotten to remove. After the protagonist rescues the love interest there's a scene where the two embrace in front of the ship's window, framed by the Earth and stars in the background. After that we cut to the hero in his ship as he heads out to defeat the bad guy. Only this time, the hero's face was covered with lipstick, and he had a goofy grin on his face and a cigarette hanging out of his mouth. That's obviously very tame by today's standards, but at the time it was pretty risqué and I was horrified that the game almost launched with that feature..."

SCREEN: AMIGA
★ ★ ★ ★ ★
ALSO SHOWING ON: ATARI ST, MAC, PC
0000000000001986

» SDI stands for Strategic Defence Initiative. So now you know.

» The adventures of Sloan McCormick were translated to other systems, including Atari ST and Mac.

ROCKET RANGER

Considered by many fans, along with founder Bob Jacob, to be Cinemaware's finest hour, *Rocket Ranger* thrust players into the role of a lone Nazi-busting hero strapped to a Lunarium-powered rocket pack.

"Designed by *Defender Of The Crown*'s Kellyn Beeck, it was a ripping yarn involving giant zeppelins, kidnapped scientists and Axis bases on the Moon. The strategy portion of the game was more in-depth than *Defender*, involving moving spies around a global map screen to discover or infiltrate Nazi facilities, then taking to the skies with the help of your handy Lunarium-fuelling codewheel to put them out of commission.

"*Rocket Ranger* was another game that taught me about the importance of good feedback," says John. "When we first implemented the fist-fight sequence against the Nazi guards we were using white noise (ie static) for the punching sounds. Bill Williams (*Sinbad*) was helping us with sound effects and he stayed up late one night and digitised a fight scene from an old John Wayne movie. We put these sounds in the game and that whole sequence instantly got more fun, because it made players feel like they were in a real movie fight scene!"

"Each of the cut-scene graphics took around two or three days to produce," remembers Jeff Hilbers. "The flying sequence where you were shooting down ME-109s [German fighters] was also very time-consuming as I had to make so many little framesets for the different angles of the planes. Luckily we had a neat animation tool that our programmer, Peter Kaminski, had written for us that let us script all the animations in-game. Eventually, when you got to the moon base we put in that funny Chesley Bonestell rocket sitting on a pad with a little swastika on it... "

"Disney's *The Rocketeer* movie, which came out around the same time, was also inspired by the same movie serials as our game, as well as the illustrated novel," says John. "We had been working on *Rocket Ranger* for a while when we first heard about the movie and that was sort of disappointing, but it probably helped sales. I can't remember who came up with the idea for the codewheel, but I know that Kellyn Beeck, the game's designer, came up with a very clever design that was pretty simple to use. Unfortunately, his version wasn't released and the final product was kind of a pain in the ass."

"Since all the content on *Rocket Ranger* was original we used actors and conducted our recording sessions in our office," recalls Larry Irvin. "There was a large interior room with no windows. That was where some of our artists, who liked working in the dark, had their desks. The retro movie-serial angle was fun to be a part of. Obviously the era predated everyone on staff, so it was fun and fresh to us and was suitable for a linear, sometimes light-hearted storytelling approach weaving in various game interludes. At the time the 'classic' presentation was new to the videogame generation and different from anything else on the market. Together, it all worked."

SCREEN: AMIGA

★ ★ ★ ★ ★

ALSO SHOWING ON: COMMODORE 64, APPLE IIGS, PC, MOBILE ATARI ST, NES

» A promotional comic was released to tie in with the game.

» *Rocket Ranger Reloaded* was recently pitched as a Kickstarter project. Here's hoping it happens.

» There are a great selection of interesting characters to meet in *Rocket Ranger.*

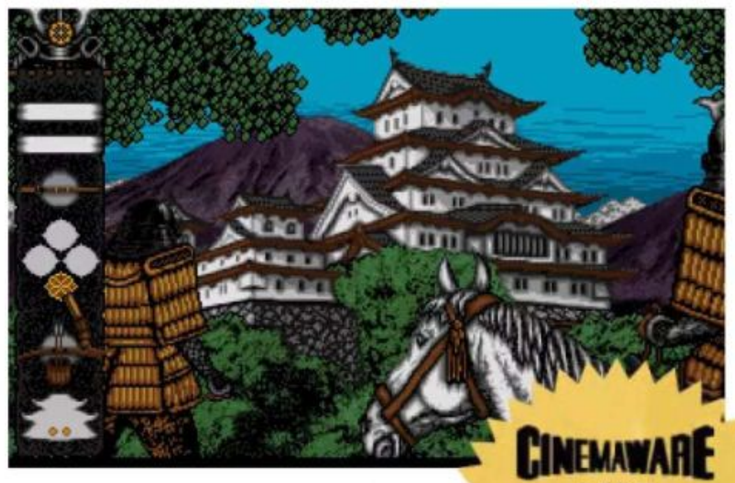
CINEMAWARE MOST DRAMATIC AWARD

LORDS OF THE RISING SUN

SCREEN: AMIGA
★ ★ ★ ★ ★
ALSO SHOWING ON: PC, PC ENGINE, CD-i
0000000000001989

Set in feudal Japan, *Lords Of The Rising Sun* was a kind of Eastern take on *Defender Of The Crown*, although with a more strategic slant including graphic representations of battles and distinct unit types. The game later became an influence on The Creative Assembly's *Total War* series of real-time strategy games. "When I was working at Gamestar some guy from the Midwest wanted to come by and pitch us on a game concept," John recalls. "In walks this guy with a Snidely Whiplash moustache and a big cowboy hat. With a slight drawl he said his name was Doug Barnett and he had a design, and some art, for a boxing game called *Star Rank Boxing*, the first game I ever worked on professionally. Several years later I hired Doug to help us make *Lords Of The Rising Sun*. From his agenting days Bob knew a guy named David Todd and we hired him to do the programming. David used to write code for the Space Shuttle. He later became a full-time Cinemaware employee."

"Though *LOTRS* was a hybrid between arcade and strategy, it incorporated elements that became standard in RTS games," says David. "Gregg Tavares did the coding for the battle sequence, which I think came out really well. The mouse control for those sequences was unique and made it kind of feel like you were manipulating fluid. One thing that I liked about the game was the ability to choose between playing the arcade sequences or letting the AI do it for you. This let you play the arcade sequences you liked and avoid any you didn't care for."



CINEMAWARE BEST DOGFIGHTING AWARD

WINGS

SCREEN: AMIGA
★ ★ ★ ★ ★
ALSO SHOWING ON: GBA
0000000000001990

Another well-loved Cinemaware title, with the company's usual slick graphic presentation, featuring a mixture of 3D missions and top-down and isometric arcade-style sequences. It's recently received a slick HD update. "We had wanted to do a flight game for a while," says John. "When we were approached by a 3D programmer named Tim Hays we cooked up the concept of doing a WWI flight sim. We spent several weeks looking for a designer, then Bob walked into my office one day and said, '*you* need to design the game.'"

"I wasn't much of a history buff and I knew nothing about WWI aviation, so I was not at all enthused by this demand. I took the afternoon off to go to the library and I was instantly hooked. The stories I read about young pilots like Albert Ball, René Fonck, Billy Bishop and even German Ace Manfred von Richtofen, were completely fascinating and enthralling. The Wright Brothers flew at Kitty Hawk in 1903, and these pilots were performing aerial reconnaissance and shooting at each other less than ten years later. The courage it must have taken just to get in the cockpit and takeoff, let alone to shoot and be shot at. Incredible… it still gives me goosebumps."

"One tricky aspect of the design was that I really wanted to simulate what it was like to be in a WWI airplane. Unfortunately, if the enemy planes were not in front of the pilot it was tough to follow them, and I really didn't want to put up a gimmicky arrow on the side of the screen. Fortunately, our producer Jerry Albright came up with the idea to have the pilot turn his head to 'look' at the enemy craft. That worked like a charm."

» *Wings* boasted plenty of action, making it great fun to play.

OUR FAVOURITE BITS

TAKE TO THE SKIES

■ Once you've located a Nazi hideout and loaded up with Lunarium, bash the joystick button in time to your footsteps until you hear a beep to achieve lift-off.

BLASTING MESSERSCHMITTS

■ Slotting German fighters with your Radium Pistol is simple at first, but by the end they can quickly overwhelm you.

PUNCHING NAZIS

■ Once inside an Axis base it's a case of taking out the guards with good-old fashioned fisticuffs in order to plunder their stock of Lunarium crystals.

CHASING ZEPPELINS

■ Doctor Barnstorff and his daughter have a habit of getting kidnapped by German airships throughout the game, so give chase and rescue them.

FLYING TO THE MOON

■ Where else would the Nazis be building a secret base but the Moon? Later in the game you can construct your own spaceship to get you there.

CINEMAWARE
SPECIAL EFFECTS AWARD

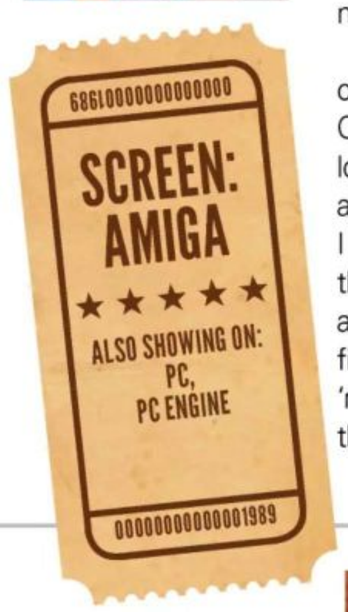
» *It Came From The Desert* easily captured the atmosphere of classic monster B-Movies.

IT CAME FROM THE DESERT

Something strange is stirring in the desert outside the south-western US town of Lizard Breath. Cinamaware's colourful homage to Fifties creature-features put you into the shoes of a sceptical geologist attempting to unravel the mystery of disappearing townsfolk and strange rumblings at the local mining works, events that formed the prelude to a full-scale insect invasion. The end result was a truly superb game that effortlessly captured the spirit of the old shool monster movies and delivered it all with typical Cinemaware flair.

"*It Came From The Desert* was really Dave Riordan's project, based on the movie *Them* with James Arness," Jeff Hilbers tells us when we press him about the game's origins. "One of the things everyone wanted was to have these giant animating ants looming out of the screen. You'd see the ants in profile walking sideways but then they would suddenly turn on you, although I always thought the full-screen ant animations were a little unconvincing! I also remember working on the top-down arcade section where the ants were chasing you. I did just about all the backgrounds on that game along with the ants, and Jeff Godfrey did the characters." It was a great partnership that gave *It Came From The Desert* a truly distinct look that set it apart from many other games of the time.

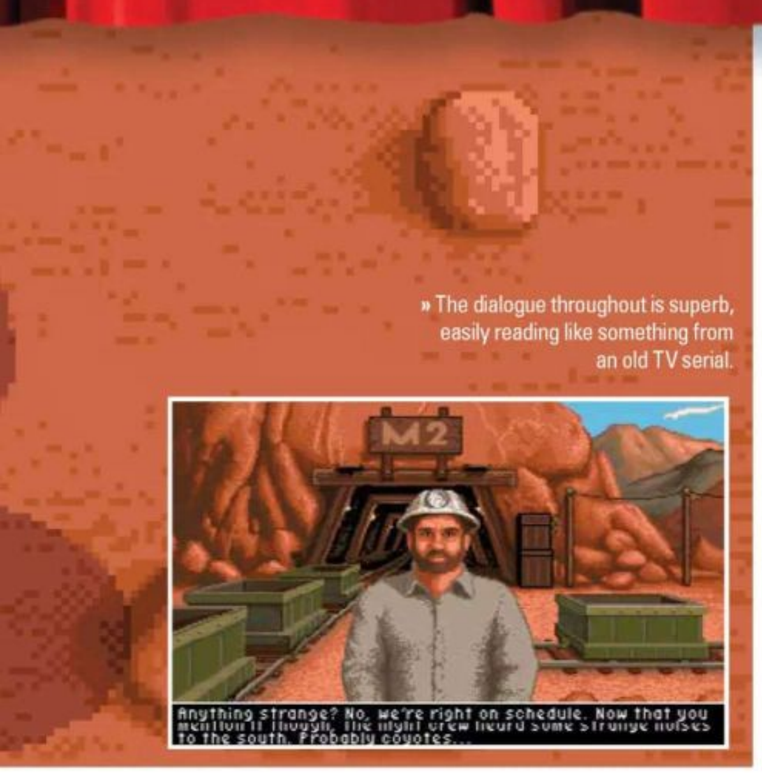
"Growing up I'd been fascinated by sci-fi creature films," reveals David about the Cinemaware's massively popular game. "I loved the pulp-fiction, the bad special effects and the beautiful screaming girls. When I began to think what stories would lend themselves to interactive narratives, big ants attacking a small town seemed like a natural fit. I knew I wanted to experiment with a 'real-time' environment – it made sense that the impending doom of the big bugs heading



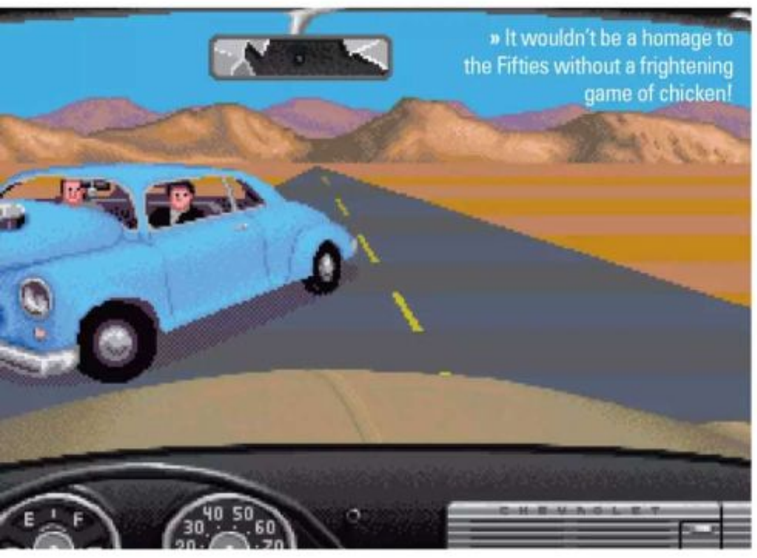
ANTHEADS

Jeff remembers: "Cinemaware was trying to make a CD-ROM version of *It Came From The Desert*. Dave got some of his pals from film and they went out to a model railway shop, bought models and constructed this little town on a large table in the office. They were intending to use film actors saying lines of dialogue and the model as a backdrop. Everybody thought that the next generation of interactive games were going to contain lots of live-action film shots. But it all proved too expensive and in the end Bob basically just ran out of money."

A cut-down version of the project ended up as the TurboGrafx version of *It Came From The Desert*, while *Antheads* was eventually released as a sequel bonus disc for the first Amiga game. "*Antheads* was one of eight other scenarios we couldn't include in the original *Desert*," says David. "Our programmer, Randy Platt, came up with the idea of using the original environment but layering in a new story. I loved the concept that people would turn into zombie-like creatures that would help the ants take over. It was almost like the original *Desert* and *Antheads* were one game, released in a serial fashion."


M2
Anything strange? No, we're right on schedule. Now that you mention it though, the night crew heard some strange noises to the south. Probably coyotes...

» The dialogue throughout is superb, easily reading like something from an old TV serial.



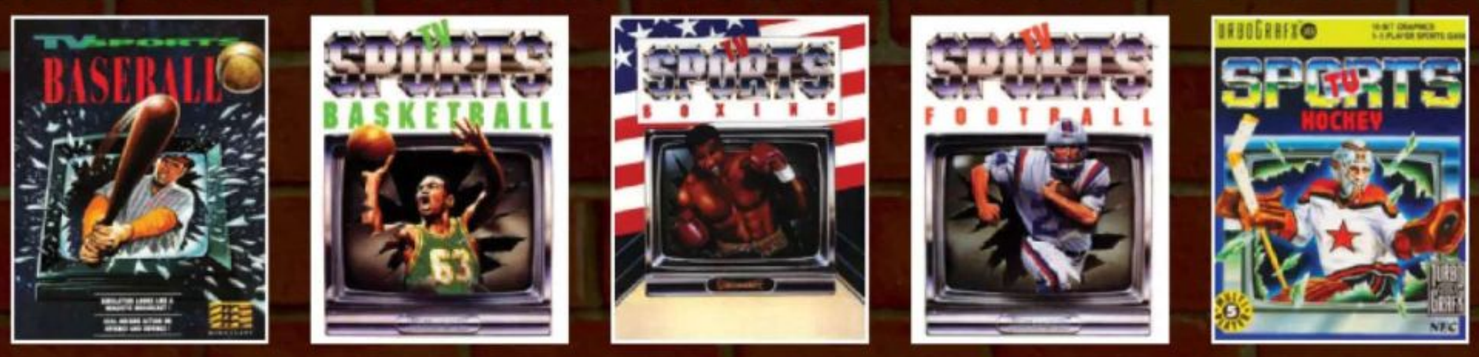
» It wouldn't be a homage to the Fifties without a frightening game of chicken!

towards town was time-sensitive. This added to the tension… If the player did nothing or goofed around the town was overrun. Half the fun was trying to get the town's people to listen to the hero when he warned them something strange was afoot. How many times have we seen a minor character in a big bug film scoff at the idea of danger, only to be eaten before he can finish his sentence?" Here's hoping it gets a tablet release soon.

» These ants may be enormous but they soon succumb to your superior firepower. Time to go exterminating.

TV SPORTS SERIES

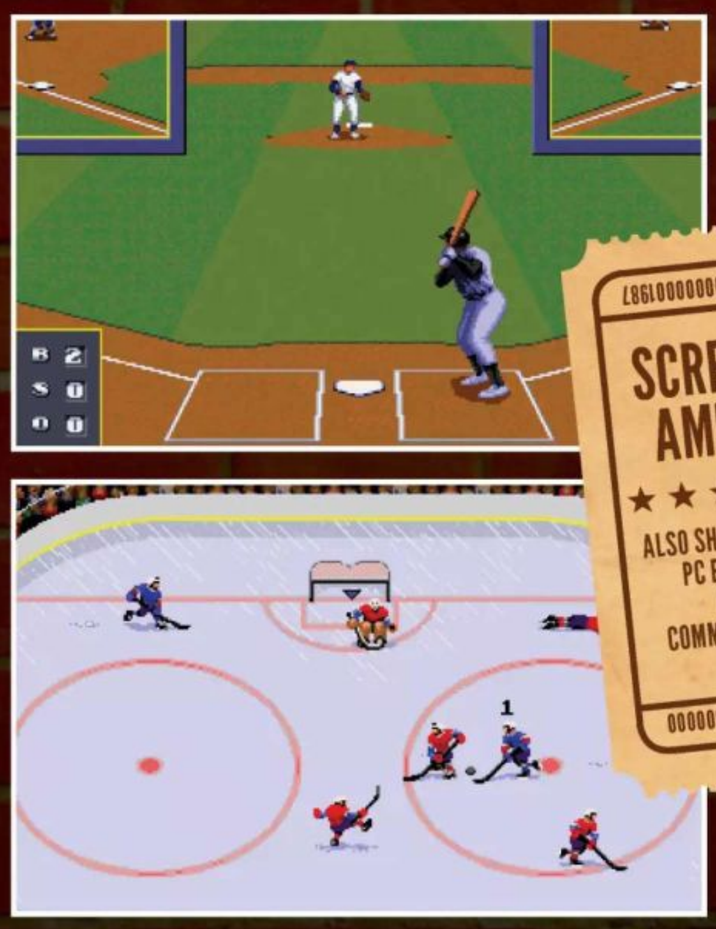
FOOTBALL, BASKETBALL, BASEBALL, BOXING, HOCKEY

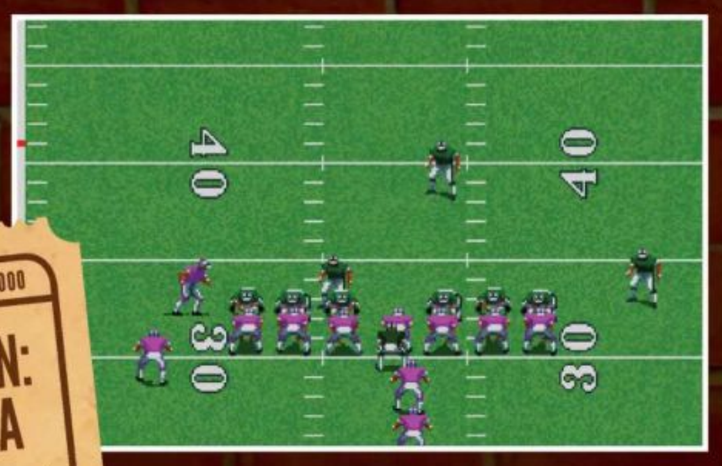


Before EA became a household name with the likes of *John Madden Football* and *FIFA*, Cinemaware beat it to the punch with a quintet of sports simulations featuring TV presentation and digitised punditry. "I was a sports enthusiast and followed US sports, having played baseball and basketball throughout school," says Larry Irvin (then Garner). "I discovered that Bob Jacob was a sports fan and John Cutter followed football, and the idea of doing a sports game began to germinate. Bob was always very brand-conscious, so the idea of a football game done by Cinemaware wasn't a natural fit. Over the course of our conversations about presentation, the TV angle was explored. Bob felt that a TV presentation could fit with a product line that featured movie presentations. That became our angle.

"Consistent with the other Cinemaware titles, we took the storytelling approach starting with a familiar pre-game show format that would include comments on the upcoming game. Of course, to complete the TV presentation feel, we had half-time and post-game segments. Our host was 'Turk McGill', who looked like me, and our sideline correspondent was modelled after Bob himself. The crowd featured characters modelled after other Cinemaware staff. Since we did not have official licences, we had to create team rosters and player names. One of the rosters on *TV Sports Basketball* was a collection of twelve Cinemaware employees. We used nicknames that included the likes of 'Gunner' Garner', 'Cookie' Cutter and 'Doctor' Duggan', coached by 'Jammin' Jacob.

"At one point during development, I needed some sound effects and voice placeholders for testing. Having a large supply of voice samples from our previous titles, *Three Stooges* samples became sprinkled throughout *TV Sports Football*. Somewhere I still have a version of the game with *Three Stooges* sounds. Ironically our sound guy on *TV Sports Football*, Jim Simmons, left the company to become the programmer for the original Sega Genesis version of *Madden Football*."





SCREEN: AMIGA

★ ★ ★ ★ ★

ALSO SHOWING ON: PC ENGINE, PC, COMMODORE 64

Special thanks to Lars & Sven of Cinemaware PR and Syd Bolton for their help with this article and The Regent Centre for its assistance with the photography used in this feature.

THE MAKING OF...

THE SECRET OF MONKEY ISLAND

What do you get when you cross sword fighting with pirates, mon… and a rubber chicken with a pulley in the middle? Kim Wild dons a pirate hat and eye patch to chat with Ron Gilbert and Dave Grossman about their classic Amiga game

» Guybrush introduces himself, which leads to one of the most memorable adventure games of all time.

» Ron Gilbert's love of movies shows through with the disclaimer above.

"WE WROTE THE SCRIPT AS WE WERE DOING THE PROGRAMMING. YOU COULD NOT DO THAT TODAY" RON GILBERT

The Secret Of Monkey Island is one title that comes to mind as being one of the all time classics of adventure gaming. Stuffed with logical puzzles, offbeat humour, sword fighting and some truly memorable characters, *The Secret of Monkey Island* is a prime example of how to create an adventure that can stand the test of time and endure forever.

It would be some time from Ron Gilbert's arrival at LucasFilm Games before *Monkey Island* would begin development. To begin with, his main role was that of the humble conversion. "My first job in the industry was with a company called Human Engineered Software where I was doing C64 programming," remarks Ron. "They went bankrupt only a few months after I started. I spent about six months looking for a job and was about ready to go back to school when I got a call from someone at LucasFilm. They were looking for someone to convert the Atari games they were doing for the C64." Dave Grossman's entrance into the videogame industry would occur much later and was something that occurred entirely by accident. "I was a graduate school refugee looking for something to do that was interesting without being morally reprehensible. I wasn't specifically trying to get into computer games or anything, but when I saw the ad I thought "Ooo! Yeah!" All of a sudden I was glad I hadn't gotten any of the other jobs I'd interviewed for over the preceding six months."

» You'll get to meet a variety of characters on your travels. If you're like us, you'll try and insult them every chance you get.

After the conversion had been completed, Ron Gilbert teamed up with Gary Winnick to create the first LucasFilm point-and-click title, *Maniac Mansion.* It would be this game that would see the creation of SCUMM (Script Creation Utility for *Maniac Mansion*) – the engine which has been used in every LucasFilm/Arts adventure to date. The idea for SCUMM was borne out of Ron's hatred of typing "I hated playing adventure games where I had to type everything in, and I hated playing the "second guess the parser" game, so I figure everything should be point-and-click". Dave Grossman explains: "The SCUMM point-and-click interface was developed as an answer to the parser, which was what most graphic adventures used in the Eighties. Parsers let you try more or less any action you can think of, but most of us felt they were just too frustrating and slow to use, and that the limited ability to RESPOND to an infinite choice of actions showed the cracks in the fantasy too plainly. We tinkered with the interface with each new game, trying to make it as easy to use as possible, while still giving the player the means to specify a reasonable range of actions."

Although the system is now wholly owned by LucasArts, Ron feels that the secret of its success is still down to the quality of the games. "I think SCUMM has been successful because we built good games with it. Without the good games (and the silly name), no one would remember a piece of technology."

» Guybrush realises the way to a woman's heart is not by chocolates but flattering her with his conversational skills.

While Zak McKracken came along, Ron began to put together ideas for *Monkey Island,* but development was put on hold as LucasFilm assigned the team with making a game to tie in with the *Indiana Jones And The Last Crusade* movie. This proved to be incredibly beneficial, as many of the development lessons learned ensured that *Monkey Island* was a more coherent game. "I did *Monkey Island* after *Indy*, so there was a lot I learned from how the puzzles came together," explained Ron.

Once *Indy* had been completed, Ron was able to continue design on *Monkey Island,* which came from a "love of Pirates, mostly driven by the Disney ride, Pirates of the Caribbean. I also wanted to make a game that was kind of like fantasy, because it was popular, but I am not a huge fantasy fan. Pirates seemed like a good compromise." To begin with, the main protagonist remained nameless and his humorous name came as a result of a graphics file. Steve Purcell, who worked as an animator, was using Dpaint to create the characters and saved the picture of our hero as a "guy". Selecting a file within

» The underwater puzzle that is simple, but ingenious. Also the only place where Guybrush can die.

» Stan – used ship salesman, con merchant and all round animated guy – shows his deep love for Arnie.

DEVELOPER HIGHLIGHTS

MANIAC MANSION
SYSTEMS: C64, AMIGA, ATARI ST, PC
YEAR: 1989

DAY OF THE TENTACLE
SYSTEMS: PC
YEAR: 1993

SAM AND MAX: HIT THE ROAD
SYSTEMS: PC
YEAR: 1993

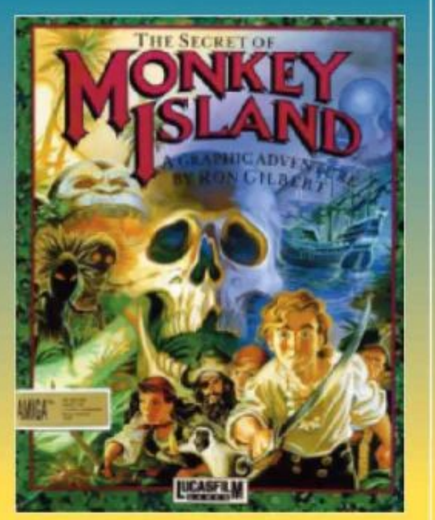
IN THE KNOW

» **PUBLISHER:** LUCASFILM GAMES

» **DEVELOPER:** LUCASFILM GAMES

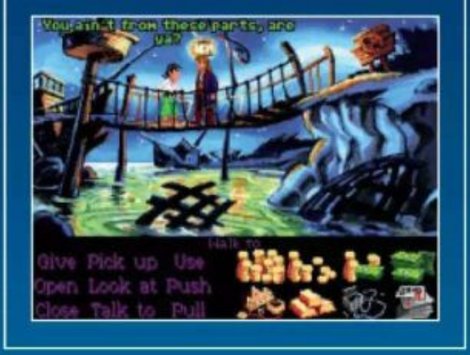
» **RELEASED:** 1990

» **GENRE:** ADVENTURE GAME



LOOK BEHIND YOU: A THREE-HEADED MONKEY!

In 1991, a sequel was released in the form of *LeChuck's Revenge*, a game that expanded upon the original in every department. However, one area that has been particularly hard for fans to accept is the controversial cliffhanger ending, which Dave Grossman reflects "references *The Empire Strikes Back* rather heavily". Although follow-up title *Curse Of Monkey Island* did an admirable job of providing an explanation as to what happened to Guybrush and LeChuck, the fact that the game was developed by a different team means that many fans still hanker after the "real" *Monkey Island 3*. However, Ron Gilbert hopes that one day he will once again regain the rights to the series and finish the trilogy once and for all. "The secret will be revealed. If I get to make another *Monkey Island*, it will be called "Monkey Island 3a: The Secret Revealed or your Money Back."



"I GOT SICK OF PLAYING ADVENTURE GAMES WHERE YOU DIED WHEN YOU DID ANYTHING WRONG" RON GILBERT

You know, bad things could happen to a person in a dark, deserted alley like this one.
Walk to
Open Walk to Use
Close Pick up Look at
Push Talk to Turn on
Pull Give Turn off
2 pieces of eight
hunk of meat
pot
fish
rubber chicken

» Unfortunately for you, Sheriff Fester Shinetop is something of a jerk. Try and stay clear of him.

» Bribery really is the key to becoming a mighty pirate. Failing that, violence solves everything.

the program calls it a "brush", so the picture would often be saved as guybrush and the name stuck. Threepwood was decided as a result of a company competition. General Manager Steve Arnold really liked "Chuck" and had wanted a character with this name to feature in a game, so Threepwood's nemesis "LeChuck" was born.

Monkey Island's unique blocky style was down to hardware limitations rather than conscious design. The original PC version was comprised of 16 colours at 320x200 resolution, which meant that the design had to be simplistic. "If we had better hardware to do graphics, they would have looked better. But that lack of high-end graphics really causes you to focus on the game and story more," continues Ron.

"I had most of the main puzzles done before we started," explains Ron. "I'd just start drawing boxes on a piece of paper, connecting all the "locks" and "keys". Once production started, Tim, Dave and I would hang out and brainstorm all the little pieces and fine-tune things that were not working."

Dave explains a little more about his role: "My job in the early days, on the *Monkey* games, was mostly about details – telling characters where to walk, writing scenes and dialogue for them, helping design strings of puzzles, and making sure the cliffs crumbled on cue while Ron Gilbert kept track of the big picture. It was like an apprenticeship (you know, no pay but you learn a lot), and after a couple of years Tim Schafer and I took charge of our own project, *Day Of The Tentacle*. We still did most of the writing, though, because we liked to."

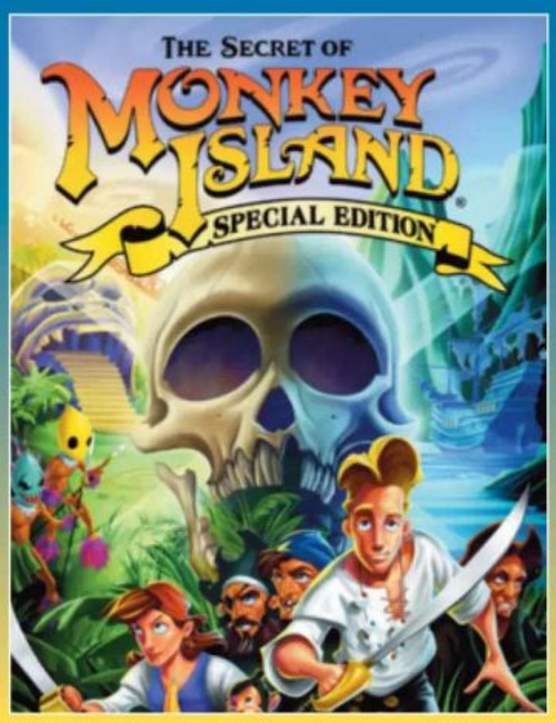
One of the most memorable puzzles is that of insult sword fighting (see boxout). This once again came from Ron's love of movies. "I was inspired a lot by movies. I love movies and back then I would go to the theatre several times a week. When I am designing, I also spend a lot of time driving and listening to music. When designing *Money Island*, I watched a lot of old pirate movies, and they always spent more time in a sword fight talking to each other then actually fighting. So I figured that would be an interesting gameplay system. Also, if you're going to do a pirate game, there has to be sword fighting, but back then adventure gamesplayers hated any action in their games, so doing this turned it into a (funny) puzzle."

What makes the puzzles of *Monkey Island* more pleasurable is that the player can explore the game freely without death lurking around every corner. With *Monkey Island* (with the exception of depriving Guybrush of oxygen for more than ten minutes) it is impossible to die, placing the emphasis firmly on experimentation. "I got sick of playing (especially the Sierra) adventure games where you died any time you did anything wrong," explains Ron to us. "I felt like this was a cheap way out for the designer."

You wouldn't happen to have a root I could borrow?
I've come to interrogate the prisoner.
Excuse me, but is this the Lido deck?
I think I'll be running along.

Stand aside, troll, I'm a mighty pirate.
Oh, please, can't I pass?
How much is the toll?
Look behind you! A mouse!
Oops, sorry. I'll take the long way around.

» [Above left] Insult sword fighting is fantastic fun. [Above right] You'll never guess the identity of this troll…



» Here's the key art for the HD update that was released in 2009. The sequel received a similar makeover in 2010.

"IT WAS LIKE AN APPRENTICESHIP (YOU KNOW, NO PAY BUT YOU LEARN A LOT)"

DAVE GROSSMAN

» Guybrush is horrified when he encounters the scariest beast to roam the earth since the dinosaur.

Inevitably there were elements that never made it into the final version of the game. An amnesia plot for Guybrush Threepwood was dropped once his name was decided upon. Meathook initially gave the player three tasks before agreeing to join the crew for *Monkey Island*, but this was reduced to the funniest one as it was felt that there were too many for that section. Meanwhile, Herman Toothrot was added to make *Monkey Island* feel less uninhabited.

While the dialogue is entertaining, much of it was improvised as the game was developed. "We wrote the script as we were doing the programming. You could not do that today. You'd need to start with a script," comments Ron about the timeless dialogue. "It was like snowboarding on a hill you haven't been down before. We couldn't see the bottom, but we knew where it was and had a basic plan for getting there. But the plan changed with each bump in the terrain," remarked Dave. "A lot was either filled in or rethought as we went – the dialogue in particular, not a syllable of which had been written in advance."

Development for the sequel began almost immediately after the first and was critically acclaimed while also proving popular among the fan base. Unfortunately, Ron Gilbert left before work could begin on the third game to complete the trilogy (see boxout). "I felt that I had grown to the point where I wanted to run my own company, so I started Humongous Entertainment and we made adventure and other games for kids." The third game, however, was well received by the *Monkey Island* programmers. "I don't know about the 3D version, I haven't played that one. I did play *Curse*, though, and I liked it. It was fun, and it felt *Monkey*ish," comments Dave. Ron is equally positive about the third game, but speaks scathingly of *Monkey Island's* fourth outing. "I thought the writing was good and carried the tradition of the first two games. I did not like that Guybrush and Elaine got together. That wouldn't happen. I did not play *Escape From Monkey Island* for more than ten minutes. I could not get around the bad UI and character navigation."

Even today, the success of *Monkey Island* is unexpected to the pair. "Those were the first games I ever worked on, so I didn't have the slightest idea what to expect," remarked Dave about the game's enduring appeal. "I don't remember thinking about it at all while we were building the first one – I was just enjoying making it fun and making it funny, and it didn't really occur to me that, after we were finished, we were actually going to send it to stores where it would be seen by the public."

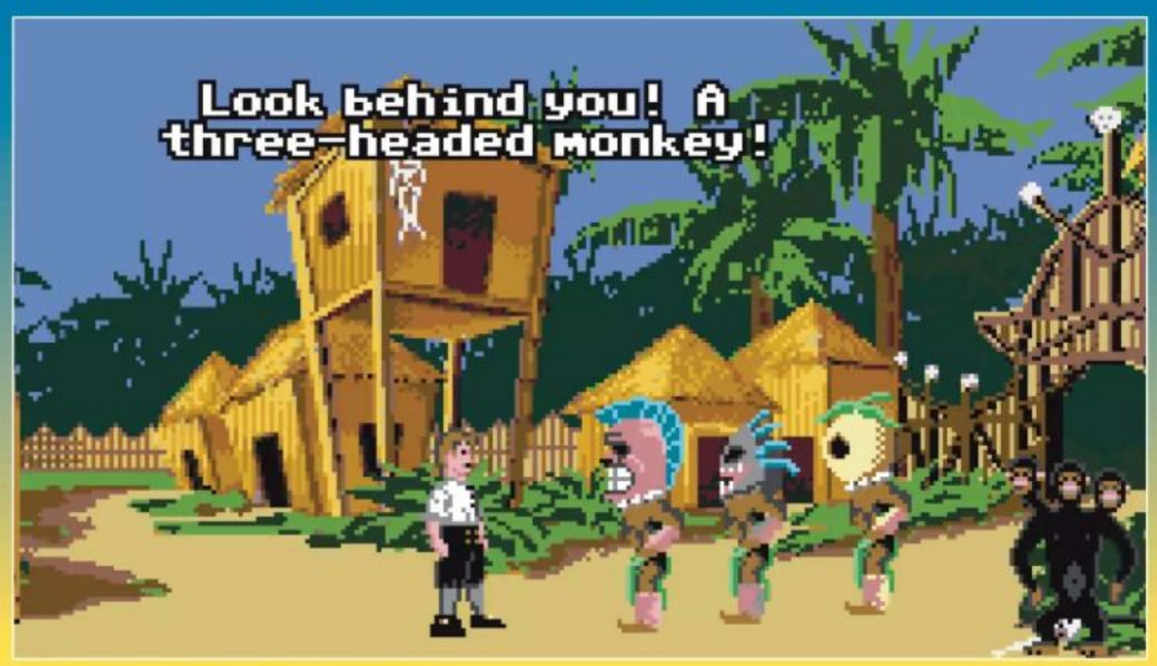
These days, Ron Gilbert remains on the outskirts of the industry working on his own game ideas and entertaining us all with his personal blog Grumpy Gamer (http://grumpygamer.com). Dave Grossman now works with adventure company TellTale Games (http://www.telltalegames.com) and has found success with a number of episodic games, from *Sam & Max* and *Jurassic Park* to *The Walking Dead*.

Of course it wouldn't be a proper article without asking the immortal question: just what is the Secret of Monkey Island? While Ron Gilbert just laughs the question off, it's Dave Grossman's remark that fittingly ends this piece. "If I told you, the trained weevils would come for me."

» A cheeky monkey helps himself to some fruit while Threepwood lies unconscious on the beach.

hear the weather's pretty nice over by Monkey Island™.
I'm going to give you mutineers five seconds to
come to your senses!
think I'll be getting back to tending the ship.

» The characters Guybrush encounters are superb, full of personality. It's never long before you here another joke.



» Look behind you, it's a three-headed monkey!

» This overhead map shows locations you have visite

» Guybrush prepares to set sail.

HOW APPROPRIATE, YOU FIGHT LIKE A COW

Sword-fighting insults is one of the most memorable aspects of the game. Here we have collated together some cutting remarks worthy of any mighty pirate.

I got this scar on my face during a mighty struggle!
I hope now you've learned to stop picking your nose.

Have you stopped wearing diapers yet?
Why, did you want to borrow one?

I have spoken with apes more polite than you.
I'm glad to hear you attended your family reunion.

There are no words for how disgusting you are.
Yes there are. You just never learned them.

People fall at my feet when they see me coming.
Even BEFORE they smell your breath?

You're no match for my brains, you poor fool.
I'd be in real trouble if you ever used them.

Soon you'll be wearing my sword like a shish kebab!
First you better stop waving it like a feather duster.

Zool

MEET THE AMIGA'S ANSWER TO SONIC THE HEDGEHOG

» AMIGA » GREMLIN GRAPHICS » 1992

***Sonic The Hedgehog* was a huge success for Sega and its Mega Drive.** In fact, such was his popularity; he caused a string of copycat clones, from Busby The Bobcat to Super Frog.

With a port of the game looking more and more unlikely for the Amiga, Gremlin Graphics created its own mascot in the form of Zool, a ninja from the nth dimension. The cute ninja was massively hyped upon release, even going so far as to be bundled with Commodore's new flagship computer, the Amiga 1200. While it ultimately lacked the tight controls and clever level design of *Sonic*, it nevertheless proved a huge hit on the Amiga, getting ported to numerous other consoles, including Sega's Mega Drive.

Zool, like *Sonic*, is all about speed. The game hurtles along at a breakneck pace, ably helped along by Patrick Phelan's bouncy soundtrack and threatens to overload your eyeballs with its gaudy, bright visuals. There are a large number of suitably cute enemies, while Zool himself is perfectly animated and full of character. He's not quite as charming as Sonic, but he's arguably better than many of the other clones of the time.

Zool's level design is also suitably different to *Sonic's* mainly due to Zool's ability to cling to walls and jump up them. As a result stages are more vertical, and there's far more incentive to scour the stage looking for bonuses and power-ups. There are also mini-games, including a neat shoot-em-'up stage that further proves *Zool* is its own game.

It may lack the ridiculous polish of Sega's 16-bit platformer, but *Zool* nevertheless became a huge hit on the Amiga, securing insanely high scores from most Amiga magazines of the time. He might not have had the same success on other systems, but Amiga owners didn't care. And quite frankly, why should they have when they were having so much fun.✱

DEVELOPER LOOKBACK

BEING SENSIBLE

SENSIBLE SOFTWARE LASTED FOR 13 YEARS. TOGETHER, JON HARE AND CHRIS YATES PRODUCED SOME OF THE AMIGA'S FINEST TITLES, FROM WIZBALL TO CANNON FODDER TO SENSIBLE SOCCER, AND QUITE A FEW IN BETWEEN. JON TAKES DAVID CROOKES DOWN MEMORY LANE

The heat was sweltering. Hundreds of sweaty people were milling around and computers were turned on all around the building. To entertain them there was a sizeable number of largely unfinished games, but putting a smile on some faces was a group of scantily clad girls. They, it seemed, had found a way to cool down. Then they began to dance. And the brows of the organisers of this 1985 PCW show began to furrow. Droplets of water swept down their faces. They had a situation on their hands and it was all too much, too vulgar.

In what would go down as one of the most memorable moments in videogaming history the girls were ushered towards the door. And, Mark Cale, the founder of fledgling publisher System 3, had just won a huge slice of publicity.

Cale had been using the girls to promote the storyline of *Twister: Mother Of Charlotte* (a change of name from the rather more controversial *Mother Of Harlots*), a game created by Jon Hare and Chris Yates, the soon-to-be founders of Sensible Software. The scantily-clad had long been used to attract attention and loosen purse strings in other industries but this was the first time it had been used so blatantly in videogaming.

Then again, this was a time for firsts. For it was also the first time Jon and Chris had got together as a pair to create a game.

"*Twister* was a bit controversial," admits Mr Hare. "We were asked to change the title of it because otherwise it was felt it wouldn't have made it on to the shelves of some shops if we didn't.

"And then there was the issue of the girls. Mark had this idea of getting girls with large breasts to promote the game.

"But the thing which sticks in my mind was that the show was also being used to show off *International Karate* and there were guys smashing breeze blocks with their hands.

"Shards of broken breeze blocks were littering the stage and the girls were complaining that they couldn't walk around properly in

IN BRIEF

Jon Hare and Chris Yates meet at school and form a band. They also get jobs together at a company called LT Software. Eventually they decide there is more money in creating games, consigning their music to a hobby. They produce *Twister: Mother Of Charlotte* for System 3 before deciding to go it alone, forming Sensible Software. The pair create lots of games primarily for the Commodore 64 and Amiga, including the brilliant *Sensible Soccer*, *Wizball* and *Cannon Fodder*. But the shift to 3D games proves difficult and they eventually sell Sensi to Codemasters.

their high heels and bare feet because it was becoming dangerous." *Twister* proved to be a landmark game for Jon and Chris although the game proved to be a let down in the sense it only made it to the Spectrum, with the Atari ST, Commodore 64 and Amstrad CPC versions never having got to the finishing stages.

"To be honest, I can't quite remember why we didn't create the game for those other formats. They just didn't happen. What was most notable though was that it was the first time Chris and I had worked together on a game," says Jon. "And the money we earned from that game helped us to set up Sensible Software."

Sensible Software was created in March, 1986 and it marked a new journey for school pals Jon and Chris. The pair had left school to go to work for the same company – LT Software in Basildon – where, during the nine months they were employed there, they had produced a Spectrum version of the Commodore 64 game, *Gandalf*, called *Sodov The Sorceror*, a title greeted with moderate success.

Working as part of a team on that game they began to see their potential at creating games as well as music and their creative partnership and friendship soon realigned itself to become a two-man start-up development team.

"We went to the same school at Great Baddow, Chelmsford, Essex, and met when we were in the fifth form", says Jon. "We were going to a Rush gig with friends. I went with a mate of mine and he went with a mate of his and both our mates knew each other.

"Chris and I ended up talking and we realised we both liked the same kinds of music. We were also in the same maths class, although I hadn't really spoken to him before that.

"We ended up forming a band together, going through loads of names – Zeus, Deus, Hamsterfish, Dark Globe (which we used for three years – it was named after a Syd Barrett track). Then we become the Amazing Technicolour Dream Globe, then finally Touchstone. Every time we changed the line-up we changed the name of the band and we kept going until about 1991.

"Initially, the music came first and games came second. But we found it hard to make a lot of money in music, so it became a hobby and the games became more important to us."

Jon's work on *Sodov The Sorceror* brought him to the attention of System 3's Cale and he was contracted to produce the graphics for the developer's *International Karate* game. Things didn't go too well and the project was later handed to Archer Maclean. He ripped the entire game apart and started again from scratch, eventually producing one of the most acclaimed games in history.

Work continued for Jon, however, mainly on converting *Skyfox*, *RMS Titanic* and *Lone Wolf* for the Spectrum. Jon and Chris then got together to produce *Twister*. Although it was not branded Sensible Software – Cale decided to rebadge it with his System 3 logo – the Sensi pair inserted a keypress which called up the Sensible Software credit.

"We were young – only 19 – and having a laugh. What wasn't funny though was that we discovered we got only 15 per cent of the money paid to LT Software for *Twister*, even though we did virtually all of the work. From that point on, we decided we would need to negotiate future deals ourselves and we made sure we didn't make the same mistake again."

ZZAP - THE GAME DIED

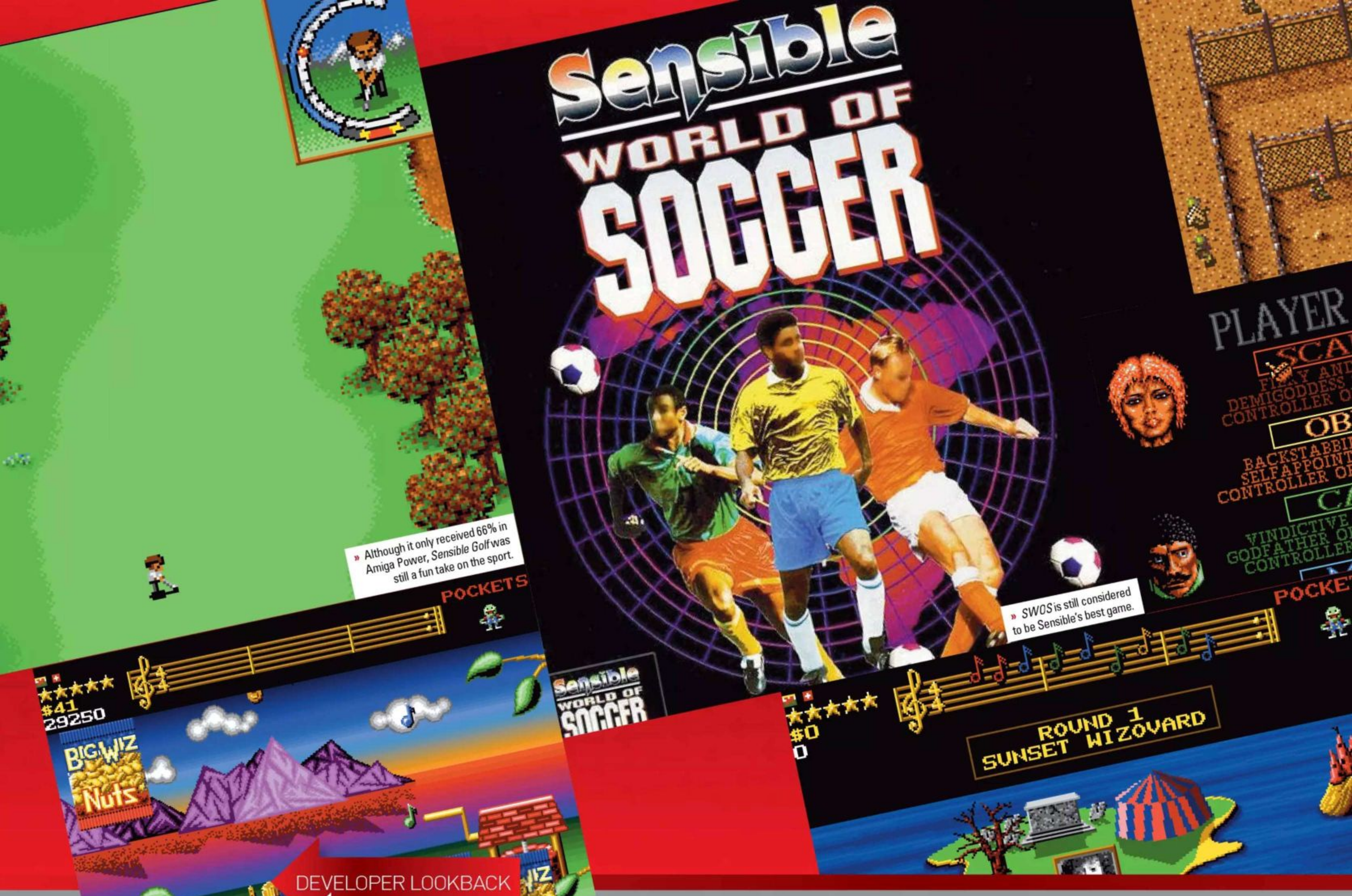
Sensible Soccer had a close relationship with many magazines, particularly with Zzap!64. Jon and Chris agreed to a competition in Zzap!64 in which readers were asked to think of a name for an *Elite*-style shooter with filled-in vectors initially called *The Day The Universe Died*.

"We had a good working relationship with the guys at Zzap!64 (I shared a house with Gary Liddon and Gary Penn at one time) and we thought the naming competition would be a great idea," says Jon.

"In the end though, the game died. We just decided not to continue it, which, I suppose, looking back, was a shame."

Zzap!64 and Sensible certainly did not fall out over the matter. The magazine, quite rightly, gave the Shoot Em Up Construction Kit a Gold Medal and Jon subsequently wrote a two-part guide to the utility.

"WHAT WASN'T FUNNY WAS THAT WE GOT ONLY 15 PER CENT OF THE MONEY PAID TO LT SOFTWARE FOR TWISTER, EVEN THOUGH WE DID VIRTUALLY ALL OF THE WORK"



» Although it only received 66% in Amiga Power, *Sensible Golf* was still a fun take on the sport.

» *SWOS* is still considered to be Sensible's best game.

DEVELOPER LOOKBACK

In actual fact, it was at this point Jon and Chris decided to make their own way in the industry. First stop – the dole.

"As soon as we finished *Twister*, we began looking at the government's enterprise scheme, which helped fledgling companies. We had to be on the dole for 13 weeks and have £1,000 each in the bank to be eligible though so we signed on and a little over three months later we got Sensible Software off the ground."

In the meantime, the pair converted *Runestone* to the C64, again for LT Software, although in the end it was never published.

Soon after setting up Sensible Software in March 1986, the pair took a demo of the work up to the Manchester-based software house, Ocean Software. It was their first attempt to sell something to a publisher and they got it signed up that same day.

"It was pretty much an immediate success for us," recalls Jon. "It was a great break so we signed, even though it was a terrible contract. We knew no better in those days."

"We finished that game – *Parallax* – over six months. It was our first proper Sensible game but, in hindsight, we rushed the end of it. The adventure side of the game could have been bigger. We wanted to do more, but time and memory just held us back."

After they completed *Parallax*, they knocked out a game for Firebird (where, incidentally, Jon met his wife, Irene), a budget release called *Galaxibirds*. It was a joke version of the arcade game *Galaxian;* the player had to shoot strange-looking geese and other birds. The pair wrote the game purely as a laugh and it went down as one of the stupidest – yet weirdly enjoyable – Commodore 64 games of all time.

"The budget games were rattled off in a week," says Jon. "They were fun side projects and they were not worth putting too much time into. We just had an idea – like putting birds into *Galaxian* – and did it. It was not academic or deep or anything like that."

Such humour and a can-do attitude became a hallmark of Sensible Software, but their next release was a serious one – at least in terms of the attention it received. Again working with Ocean, the Sensible pair created *Wizball*. And it was a smash hit.

Released in 1987, the game was made for the C64 – with music by Martin Galway – and it was later ported to the Spectrum, Amstrad CPC, Amiga, Atari ST and PC.

It was a unique, horizontally-scrolling game in which you played Wiz, a character that had magically managed to place himself inside a ball with the aim of restoring colour to Wizworld: a land that had been left grey by the evil wizard Zark. The aim of the game was to collect droplets of paint to colour the levels; the paint drops were then collected by your cat Nifta, travelling alongside you in a ball called the catalite. With lots of power-ups and aliens to shoot, it became a complex, involving game. Zzap!64 gave it 96% – and later went on to name it as the best game of the decade.

Jon says: "The concept of *Wizball* started with Chris, who created the control method and worked out the physics of the game. The colour thing was my idea and we had lots of discussions about how to make it two-player co-op. That is how we ended up with the cat idea. The idea was to create a game that would allow the player to adventure around the level a bit. We wanted the player to wander. If truth be told, though, our later game *Wizkid* contained the elements of adventure that we wanted to achieve with *Wizball*."

The success of both *Parallax* and *Wizball* had not gone unnoticed by Sensible. Jon and Chris used them to promote their next release, the Shoot-'Em-Up Construction Kit, with the box screaming: "By the programmers of *Wizball* and *Parallax*". The construction kit, which became known as SEUCK for short, was a dream for many wannabe programmers owning a C64 or Amiga. It allowed for the creation of simple shoot-'em-up games, giving the user a background editor, sprite designer, special effects composer, animation facilities and anything they needed to put a title together.

It spawned thousands of games – some poor, some ending up on shop shelves. But it is fair to say that the C64 version was able

DARLING, THEY WERE GREAT

When Codemasters snapped up *Sensible Soccer* in 1999, Richard and David Darling knew exactly what they were getting: a quality back catalogue. David Darling explains: "We'd always been really impressed with the quality of the Sensible games. They were such fun to play and the team had a lot of flair and creativity. The gameplay of their games was great. We knew Jon Hare and had a lot of respect for what he and the team achieved."

So what was David's favourite game? "For me it was *Sensible Soccer*," he says. "I still talk to people now and they are so enthusiastic about how *Sensible Soccer* was the best soccer game and had them hooked."

He added: "Jon Hare and the team were great personalities, very creative – like a rock 'n' roll band. They had fun making games and loved games and it showed through clearly.

"We're proud to have acquired such an amazing back catalogue. We've put them onto various formats, the Game Boy and mobile phones. "I think they are such classics, they'll be around for a long time to come."

» *International 3D Tennis* proved that Sensible Software was always happy to push technology.

» The fast-paced action of *Sensible Soccer* helped ensure its success.

» Codemasters co-founders Richard and David Darling did not hestiate to snap up Sensible Software.

to produce some decent games. It had collision checks between the player sprite and the background, something that was missing from the Amiga version (which was not programmed by Sensible). The Amiga version also had jerky sprites, poor scrolling, dodgy collision detection and a lack of artificial intelligence.

"It was just an idea we had and we ran with it," says Jon. "It started as a game but became a utility and we think it was pretty good. It certainly caught people's imagination."

Following SEUCK, the Sensible lads knocked out another budget game, again for Firebird's budget label. Called *Oh No!*, the game was a simple affair in which you played an ox breeder protecting your herd from alien rustlers in a decent, but not amazing, shooter.

It enabled Sensible Software to keep the money rolling in until they had their next idea. And it was one that 40-year-old Jon, a Norwich City fan, had wanted to create for years.

He says: "Chris and I were – still are – interested in football and both play it a bit. And we both liked a game called *Tehkan World Cup*. We drew all our inspiration for our next game from this."

That game was *Microprose Soccer* for the C64 and it closely resembled the 1985 arcade release, *Tehkan World Cup*: a top-down viewed game which had a large trackball and single fire button. By swiping the trackball and hitting fire in *Tehkan*, you could control the direction and velocity of the ball. Sensible Software took the same top-down view and worked on the physics of football to produce a version for home computers, albeit making use of a simple joystick.

And it had everything any self-respecting C64 owner would hope for: speed, rain (allowing for great sliding tackles), and the concept of aftertouch, allowing you to swerve the ball after you had kicked it.

More importantly, it inspired many football games and became a landmark title. Here was a game that allowed you to replay every goal and see almost everything going on around you on the pitch.

"We thought the top-down view was the best way of approaching a soccer game," says Jon. "It makes it easier for the player to aim and if the goal is in front of you and you can see the frame, it gives you something to aim for.

"I think we did it well. C+VG called it the 'Best Sports Game On Any Format Ever'."

Two years later and Sensible Software continued the sporting theme, releasing *International 3D Tennis* – "It was bizarre, the strangest game we've ever done," laughs Jon. The game was the first Sensible had produced for the 16-bits and it had the player controlling a wire-frame player. Despite the strange looks, the game played extremely well and the sprites were surprisingly fluid. And with ten different camera angles and a great two-player mode, this was yet another Sensible hit.

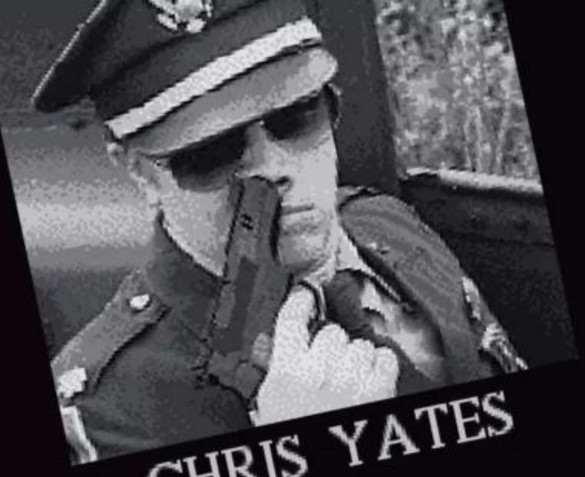
It was followed up by *Insects In Space* for the C64, which started a period of problems for Sensible Software. Jon and Chris created *Insects In Space* – a budget game in which you shot bugs trying to kidnap babies – over two months at the end of 1988.

Hewson made an offer for the game almost immediately and it was due to release it on its Rack-It label. But just as it was about to hit the shops, Hewson pulled the label and instead stuck the game on a compilation called *4th Dimension*.

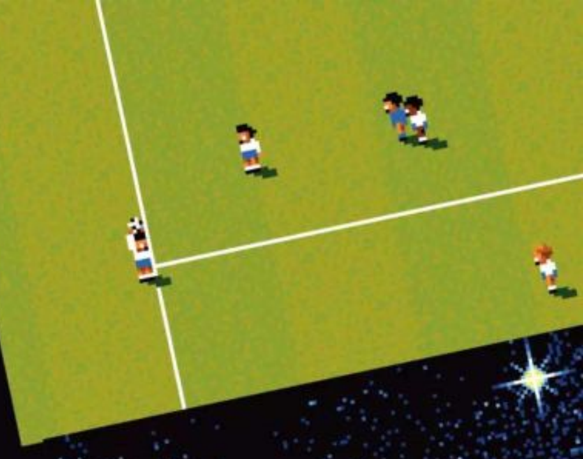
Soon, Jon and Chris were to experience their first serious set of business problems with their next wave of games developed for the 16-bit machines.

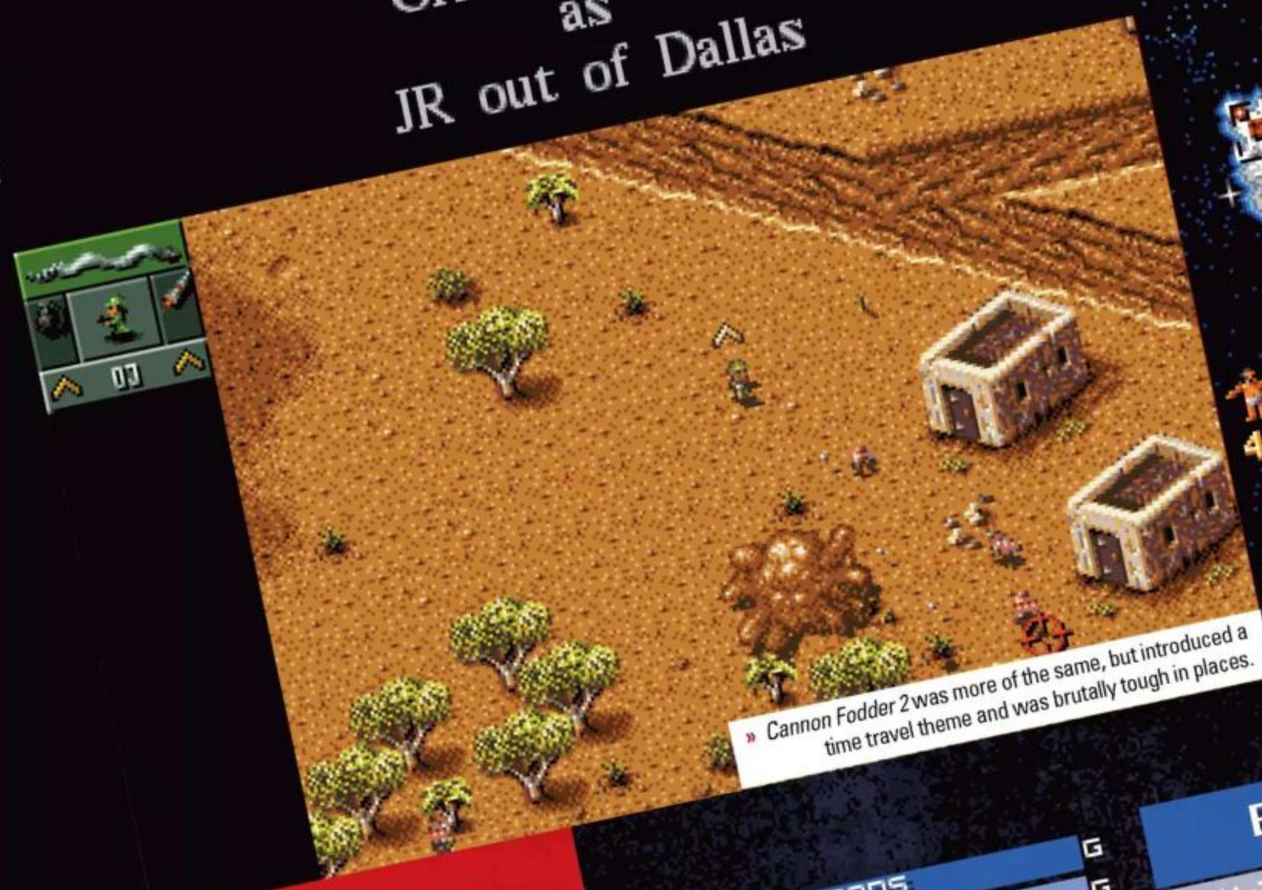
"WE THOUGHT THE TOP-DOWN VIEW WAS BEST. I THINK WE DID IT WELL. C+VG CALLED IT THE 'BEST SPORTS GAME ON ANY FORMAT EVER'"

» Although *Wizball* was released on the Amiga, the coding was by Peter Johnson.



CHRIS YATES
as
JR out of Dallas





» Cannon Fodder 2 was more of the same, but introduced a time travel theme and was brutally tough in places.

DEVELOPER LOOKBACK

The pair had signed a deal with Mirrorsoft, allowing it to publish *Mega Lo Mania*, *Cannon Fodder* and *Sensible Soccer*. At the time Mirrorsoft was a major publisher, the software house arm of the Robert Maxwell empire, the man who used to own The Mirror newspaper (and who mysteriously died on 5 November, 1991 when he fell overboard from his luxury yacht, Lady Ghislane, leaving a huge pensions crisis in his wake). Mirrorsoft began to fall on hard times in the early Nineties and then it disappeared altogether, a lack of money and support getting the better of it.

Jon recalls: "Mirrorsoft went bust just after *Mega Lo Mania* was released. Our big mistake was that we'd also signed *Cannon Fodder* and Sensible Soccer to the company as well.

"When the mess died down, we found we had lost 75 per cent of our turnover and the first quarter of our *Mega Lo Mania* royalties.

"People then tried to claim our intellectual property as their own. They wanted to keep *Cannon Fodder* and *Sensible Soccer* too.

"It made us wake up. From that point on, we ensured we controlled our IP and had it written into contracts that it was ours. Luckily, we managed to salvage *Sensible Soccer* and *Cannon Fodder* from the wreckage. It was a hard time for the industry. There were lots of people in that room with the administrators trying to rescue their money – Probe and the Bitmap Brothers for example. Some were owed lots of money. We eventually sold *Cannon Fodder* on to Virgin and *Sensible Soccer* on to Renegade."

One game that was not affected was *Wizkid*, the sequel to *Wizball*. That was signed to Ocean. *Wizkid* picked up where *Wizball* left off. The player assumed the role of the disembodied head of *Wizkid*, flying around the screen, knocking various objects on top of enemies to kill them.

"*Wizkid* turned out the way we wanted *Wizball*," says Jon. "We often developed our ideas as we went along.

"There are some companies which do lots of market research that comes up with what you should and shouldn't do. Chris and I, though, well we just didn't care what anyone else was doing. We were quite arrogant and we just thought it didn't matter about the competition, we'd do it better anyway. So that's how we developed our ideas and came up with games like *Wizkid* and *Wizball*.

"I've also found that people who worry about what others are doing don't do well themselves. We went ahead like we were in a band – we got an idea and just waited to see what happened."

It was this approach that saw the development of their next football title. Four years after *Microprose Soccer*, Jon and Chris felt it was time to produce an updated version. And *Sensible Soccer* was born. The game – called *Sensi* for short – was a 2D affair that appeared on the Amiga and Atari ST in 1992, later being converted to the PC and Mega Drive and many other platforms. The top-down view, tiny sprites, made-up player names and fictitious football teams may have been off-putting to some, but it was addictive and had gamers pinballing the ball from player to player, setting up wonderful goals in fast, furious, end-to-end matches.

It spawned a sequel, *Sensible World Of Soccer*, in 1994 – by far the better game – adding decent management elements for an all-round package.

But even *Sensible Soccer* was meddled with. By the time *Sensible Soccer '98* arrived, heralding a move into the 3D era for the franchise, fans cried foul and the series faded away like a wounded old pro (only recently did we see a comeback, with *Sensible Soccer 2006* for the Xbox, PlayStation 2 and PC).

Sensible Soccer, in short, saw the best and worst times for Jon and Chris. "*Sensible Soccer* is our most successful game," says Jon. "In terms of kudos too it's our number one, followed, I think, by *Cannon Fodder* and *Wizball*.

"It drew inspiration from *Microprose Soccer*, which, as I've said was inspired by *Tehkan*. And, at the time it came out, we were enjoying our best years. It was a period when we released *Mega Lo Mania*, *Wizkid*, *Sensible Soccer*, *Cannon Fodder* and *Sensible*

THE NO SHOWS

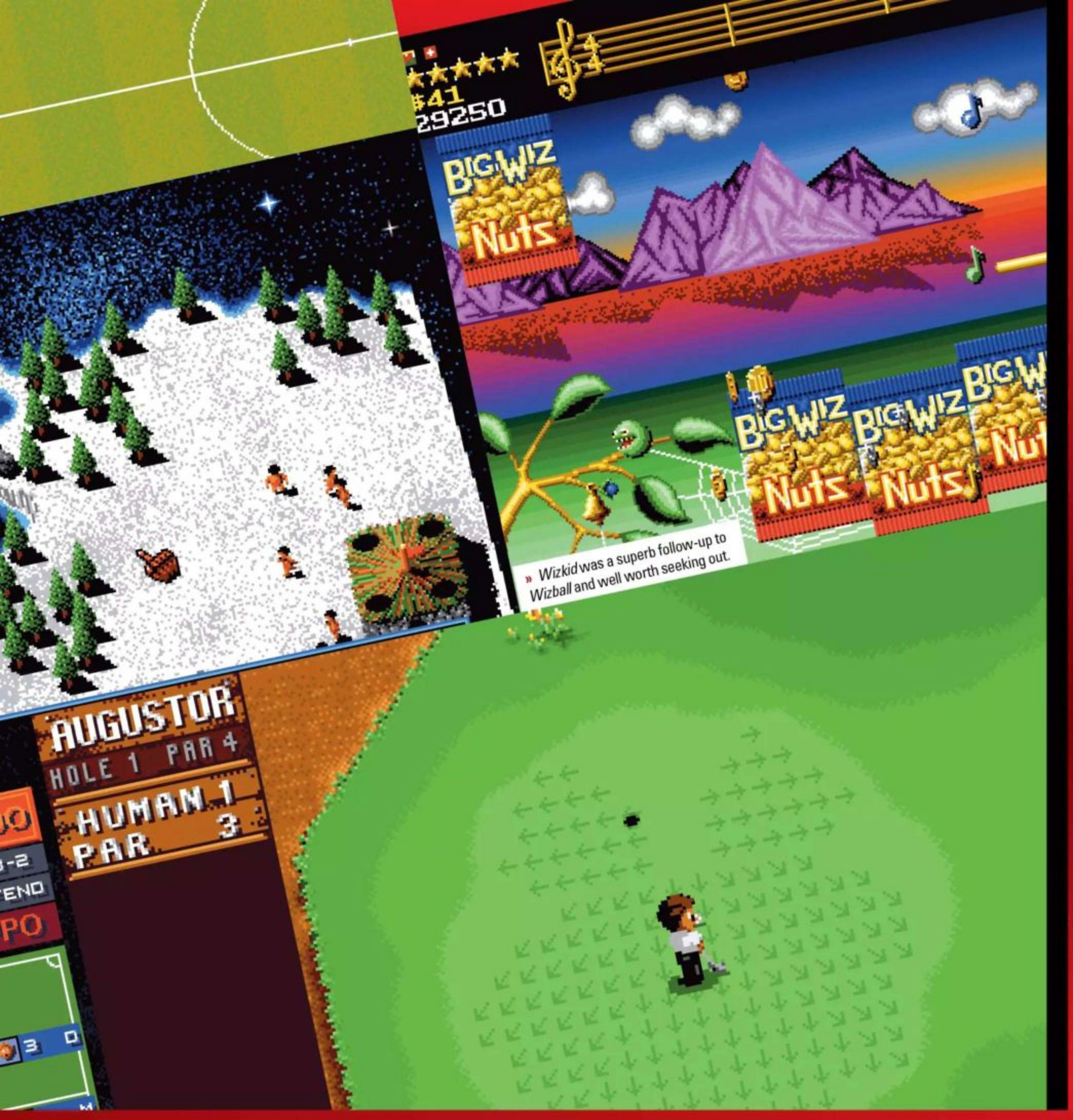
There were a few cancelled *Sensible* games, the most notable examples being *Touchstone, Have A Nice Day* and the ground-breaking *Sex 'N' Drugs 'N' Rock 'N' Roll*.

This latter game hit major problems when GT Software, which had acquired the publishing rights after snapping up Warner Interactive Entertainment, found the game to be too risque. Sensible could not sell it to other publishers either so it languished in gaming hell.

"We were trying to pre-empt 3D," says Jon Hare. "*Sex 'N' Drugs* had three hours of pre-rendered animation in it and it was expensive to make at the time, involving lots of man power and organisation. With hindsight, we needed two or three extra strong programmers."

Touchstone was a big RPG project but Origin, which was going to publish the game, eventually decided to call a halt to it in November 1989, believing the market was turning to consoles.

Have A Nice Day was earmarked for the PlayStation as an FPS. It had technical problems, primarily with the 3D and was canned.



» *Wizkid* was a superb follow-up to *Wizball* and well worth seeking out.

SOFTOGRAPHY
1986-2000

1986
Twister: Mother Of Charlotte (Spectrum)
Parallax (C64)
Galaxibirds (C64)

1987
Wizball (Spectrum, C64)
Shoot-Em-Up Construction Kit (C64, Amiga)

1988
Oh No! (C64)
Microprose Soccer (Spectrum, C64)

1990
International 3D Tennis (Spectrum, C64, Amiga, Atari ST)
Insects In Space (C64)
Mega Lo Mania (Atari ST, Amiga, MegaDrive, SNES, DOS)

1992
Wizkid (Atari ST, Amiga)
Sensible Soccer (Atari ST, Amiga, DOS, SNES)
Sensible Soccer International Edition (Atari ST, Amiga, Amiga CD32)
Sim Brick (Amiga)

1993
Sensible Soccer 92/93 (Atari ST, Amiga)
Cannon Fodder (Atari ST, Amiga, DOS, Archimedes)

1994
Cannon Fodder 2 (Amiga, DOS)
Sensible Golf (Amiga, DOS)
Sensible World Of Soccer (Amiga, DOS)

1995
Sensible World Of Soccer 95/96 (Amiga, DOS)
Sensible Train Spotting (Amiga)

1996
Sensible World Of Soccer European Championship Edition (Amiga, DOS)
Sensible World Of Soccer 96/97 (Amiga, DOS)

1998
Sensible World of Soccer 98 (DOS, Windows 9x)

1999
Sensible Soccer 98 European Club Edition (PlayStation, Windows 9x)

2000
Cannon Fodder (Game Boy Colour)

Golf all in quick succession. And in 1992 and 1993 we were named Developer Of The Year two years running.

"We were getting decent royalties and contracts – something we had begun to achieve pretty much from the moment we began to create for the Amiga. And it's fair to say that between 1991 and 1995 we just couldn't make mistakes. It was perfect – lots of cash, lots of creative control, good people, good times."

From the mid-Nineties, however, the industry was moving towards 3D. By this time, Sensible Software had six staff: Jon and Chris, lead programmers Chris Chapman (*Mega Lo Mania*, *Sensible Soccer* and *SWOS*), Julian Jameson (*Cannon Fodder I* and *II* and *Sensible Golf*), Dave Korn (who converted the 16-bit versions of *International 3D Tennis* and did some support programming on Sensible Soccer) and artist Stoo Cambridge (*Cannon Fodder I* and *II*, *Sensible Golf* and *SWOS*) and they had moved from the Cambridgeshire town of March to Saffron Walden, Essex but it was not enough to lead them into the new era.

"The move to 3D was innovative stuff, but we missed the boat by a couple of years and were too slow to react," says Jon.

"I think we were one of the last companies in Europe to move from 2D and when we did we were not very efficient with it. You can't do 3D with six people. We also began to hit other problems as we started to expand. We realised we couldn't deal with middle management or manage large teams. We were too used to doing it all. Chris and I even make tea and we were rubbish at delegating.

"In the end, we took on too much. People offered us really good money and we'd agree to do the jobs, but we ended up making things like *Sensi 98* which were not great."

Things began coming to a head and the Sensible Software lads realised something had to change. The world was becoming more commercial and making games suddenly became very expensive.

"Football was becoming more commercialised and licence-oriented," Jon exclaims. "It was more risky to take a game like *Sensible Soccer* and create teams that had similar names to the real thing.

"We were also finding that far from being able to maintain the 49 per cent average profit margins, which we had made during the 13-year period running from 1986 to 1999, we were now looking at having to expand our company to compete and to take more risks than we were used to for profit margins of as little as 10 per cent to 20 per cent.

"When you're in a position that you own your own house and stuff, you do start to see things as a risk.

"So we sat down and made a decision. We sold to Codemasters. We played a simple game and cut our costs. We got out while we were still up.

"We selected Codemasters as our prime target. We liked what we saw with them and there was no one else we wanted to sell to."

That was in 1999. The Sensible era drew to a close having created no fewer than seven number one games in the UK over 13 years, scooping many industry awards in the process.

Jon went on to design many games for Codemasters, including various versions of *Sensible Soccer* and *Cannon Fodder*.

"I have no room to complain," he surmises. "We ran the company in the way we wanted and created some great games. I enjoyed all aspects of my time running Sensible. It was great to be able to be so creative and successful and it was just as much fun securing the contracts; we learnt the rules, we played the game, and had a feel for what we were doing. I'm proud of what we achieved."

» Jon Hare, the creator of one of the greatest footy games ever made.

"WE RAN THE COMPANY IN THE WAY WE WANTED AND CREATED SOME GREAT GAMES"

CLASSIC MOMENTS

Flashback

» **PLATFORM:** AMIGA » **DEVELOPER:** DELPHINE SOFTWARE
» **RELEASED:** 1993

Sometimes, reaching your goal doesn't feel like much of a reward. For Conrad Hart, making it to the third stage of *Flashback* is just such a pyrrhic victory – he's just spent his time working a series of jobs, and now he has the credits necessary to buy some false identity papers. The purpose of all this is to gain entry into *Death Tower*, a deadly TV game show. As you might have guessed from the name, it's not quite *Blockbusters*.

Death Tower is a turning point in the game, raising the stakes after a couple of stages in which success rests more heavily on your platforming skills than your reflexes. For one stage, Conrad gets to engage in some tense action reminiscent of *The Running Man*, as he battles through a studio filled to the brim with enemies and lethal mines. Failure will cost Conrad his life, but the game is his only chance to return to Earth – so failure is not an option. Give the audience what they want. *

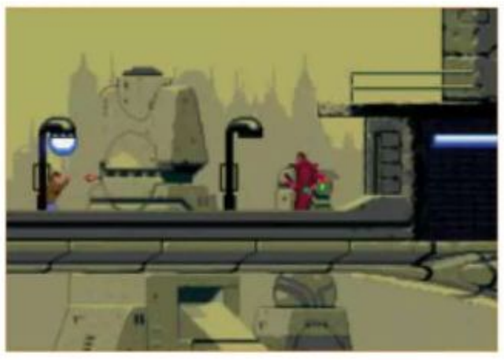
BIO

Could lightning strike twice? Delphine Software was certainly banking on it with *Flashback*, a cinematic platformer which bore a strong resemblance to its previous hit *Another World*. Despite a lack of involvement from the developers behind that game, *Flashback* would successfully develop the formula it established by including well-designed puzzles, impressive cutscenes and peerless animation. The game achieved massive critical and commercial acclaim, becoming the best-selling game developed in France and later receiving conversions to a wide variety of systems. A sequel titled *Fade To Black* followed in 1995, and a modern remake also named *Flashback* was released in 2013.

MORE CLASSIC FLASHBACK MOMENTS

Motion captive

Let's be honest – after first loading *Flashback*, you made little progress, because you were aimlessly moving Conrad around the level just to watch his animations. We did the same, because his rotoscoped animation was absolutely incredible. Videogame characters had rarely looked so lifelike, making you really care for him as a result.



Hard homecoming

Things aren't exactly a picnic after Conrad wins the Death Tower game show. Earth isn't a tremendously nice place to be, particularly when you're being chased around by agile enemies with jetpacks. They're just the start of the trouble, though – you soon find out that the villainous shape-shifting aliens are planning to invade the planet en masse.

Enemy territory

The aliens have made their play to take over Earth, now it's your chance to fight back. The climax of the game takes you to the homeworld of the aliens. They're not just going to let you roam free, though – the aliens are fast and hard to kill, and they're everywhere. Stay on your guard and bring them down! A tense exciting moment.

Get your popcorn

We'd rather be playing a game than watching it, but *Flashback's* cutscenes are so good that we'll make an exception. They're brief enough to sustain your interest, and so beautifully animated that you wouldn't want the opportunity to skip them. Some games claim to be cinematic – *Flashback* was one of the few to deliver on that promise.

THE MAKING OF...

HIRED GUNS

Unveiling a journey through fantasy and science fiction, James Churchill speaks to Steve Hammond and David Osborne about the underrated gem in DMA Design's crown

IN THE KNOW

- **PUBLISHER:** PSYGNOSIS
- **DEVELOPER:** DMA DESIGN
- **RELEASED:** 1993
- **PLATFORM:** AMIGA, PC
- **GENRE:** RPG

"HIRED GUNS 101"

■ *Hired Guns* is a first-person sci-fi dungeon crawler with a four way split screen. Whether navigating through cavernous levels, shooting bio-engineered creatures or puzzle solving, it's possible for one player to control four characters simultaneously.

As a first-person dungeon crawler with FPS elements, a science fiction setting and four-way split screen gameplay, *Hired Guns* is unique. And for Amiga owners in 1993, unprecedented. Whilst dungeon crawlers like *Dungeon Master* and *Eye Of The Beholder* previously enthralled gamers, they didn't boast a grimy cyberpunk visual style, tense four-way co-operative play or the vast array of characters and weapons seen in *Hired Guns*. Instead of competitive play emerging in first-person shooters of the time such as *Doom*, *Hired Guns* focused on co-operation, capturing the experience of fighting as a team of mercenaries with your mates by your side. "It was a four-way split right from the beginning," recalls Steve Hammond, the writer for the game. "All of the team members had to be placed in the right spots to solve puzzles. It was something you simply couldn't do with a single character."

But not everything was set in stone. *Hired Guns* was originally envisioned with a Western fantasy setting in mind, being programmed and created by lead designer Scott Johnston using the assembly code for the Motorola 68000 microprocessor. Steve recalls the prototype (known as *3DGame*) vividly. "To represent avatars in the prototype, photos were taken of the DMA Design staff pulling silly faces which were altered to become giant disembodied heads floating around the maps. They were the giant floating heads of DOOM!"

» Characters have different abilities and load outs, making team building a cerebral task in itself.

It was after this phase that Steve was brought into development as a writer. "I wasn't even a writer at DMA to begin with. I was some kind of graphics guy, porting visuals from the Amiga to the C64 for *Ballistix* and *Shadow Of The Beast*," says Steve. But his creative efforts outside of work landed him the role. "Scott wandered over to my cave one day – 'caves' were what some of us made with the cubicle partitions – and was impressed by a screamsheet for the roleplaying game *Cyberpunk 2020* that I had written, typeset and pinned to my wall. He asked me if I wanted to write the *Hired Guns* story. I immediately said yes, without any idea of what would be involved." Steve ended up writing biographies for the characters, a short story which acted as the game's narrative prequel, in-game dialogue triggered by player actions and the backstory for the game's solar system, with

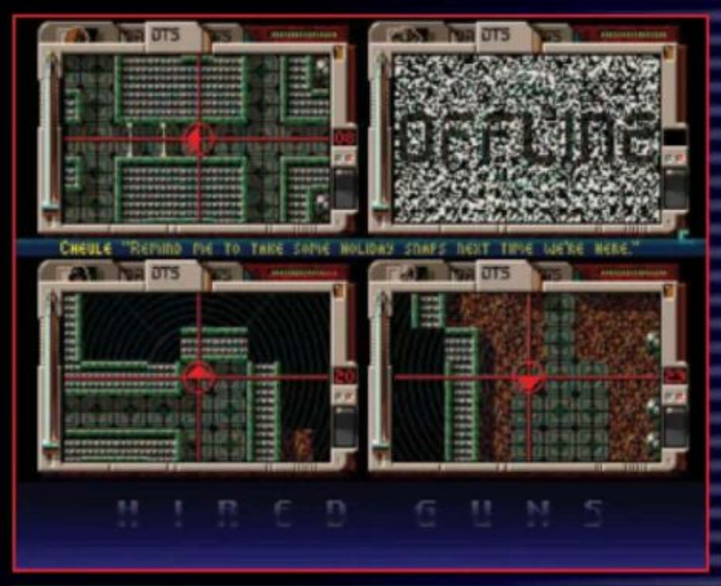
details on every planet. "I'm a complete astronomy nut," he adds.

It was soon after Steve's involvement that *Hired Guns* saw the shift of the setting from fantasy to science fiction, although the reason for this decision remains debateable. "I have to be fair and explain that Scott remembers this differently from me. As far as I could see, all games of the RPG genre were fantasy, with science fiction being underrepresented to the point of invisibility, so I persuaded (as I saw it) Scott to turn it into a science fiction game. Scott says he turned it into a science fiction game because of *Aliens* and all the cool weaponry, particularly the gun turrets. Perhaps it was just one of those things which was meant to be."

This new direction lead to *Hired Guns*' gritty visual style. "One of the reasons it looks good is its unified palette, it wasn't bright and garish like so many games were," says visual designer David Osborne (a.k.a. Oz). "All the in game assets were done by hand first. For art we used Deluxe Paint 4. But the cut scene images were photo composites done on a Mac, not too common a practice for the day." However, the visual designs for the monsters had already been implemented before the change of setting. The team at DMA then decided to work around the problem instead.

"Things were so lean in production you would change what you had more often than throw it on the editing floor," David says. This approach proved an interesting challenge for Steve. "Changing [the narrative] became about providing a science fiction workaround for what were clearly fantasy monsters. Once I'd had the idea of making them engineered bioweapons the plot started to suggest itself."

» Using a mouse over joypad is the optimal control method.



» The mapping system helps create a deep and cohesive world.

However, the narrative was the one element cut short for the end product, leaving out the original campaign scenario: one where the characters were lured to test bio-engineered weapons under the pretence of a hostage rescue mission. Steve says: "There were some issues with the Amiga being able to fit all the needed assets in. What we ended up with was a simplified mission to collect four nukes and blow it all up. A consequence of this was that the Image Verification Camera was left out. This would have been part of the plot to obtain evidence of illegal genetic experimentation. It was a camera whose images could be ▶

DEVELOPER HIGHLIGHTS

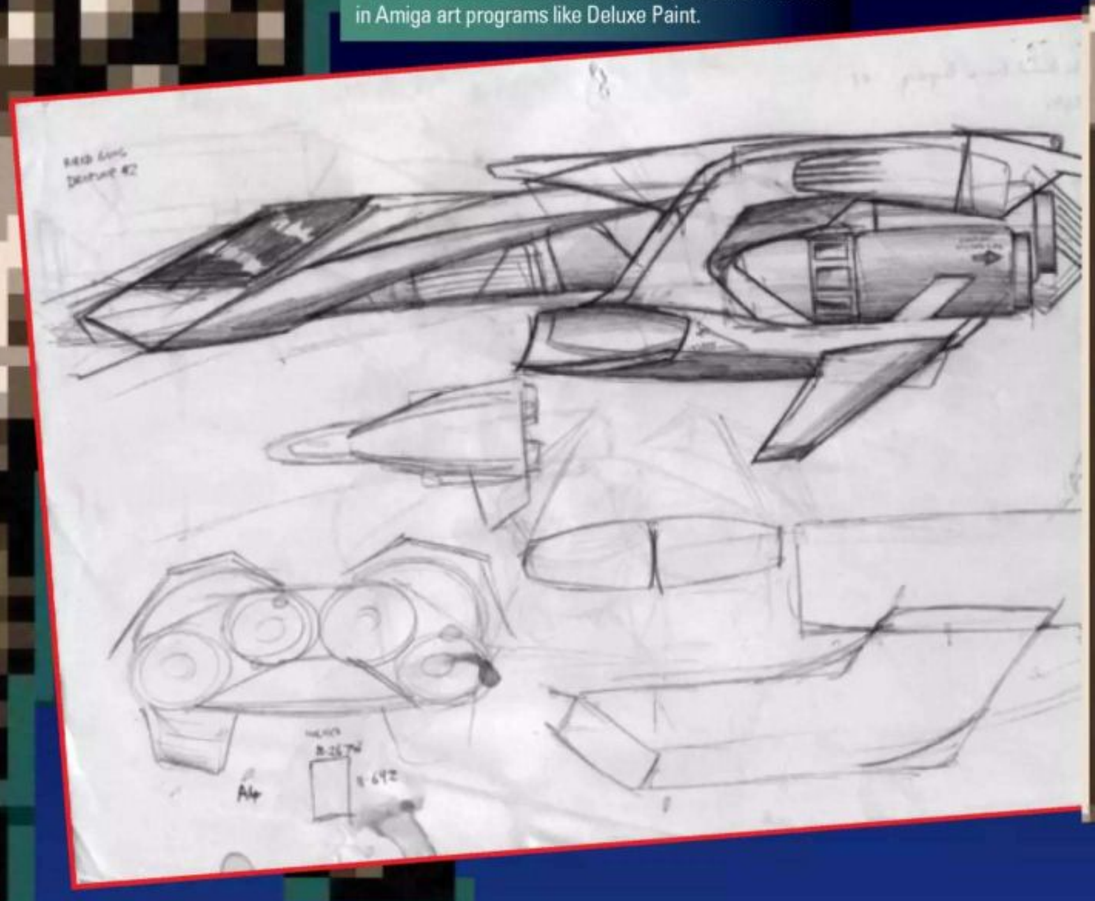
BLOOD MONEY
SYSTEM: VARIOUS
YEAR: 1989

LEMMINGS (PICTURED)
SYSTEM: VARIOUS
YEAR: 1991

WALKER
SYSTEM: VARIOUS
YEAR: 1993

» *Hired Guns* also allows character sprite customisation in Amiga art programs like Deluxe Paint.

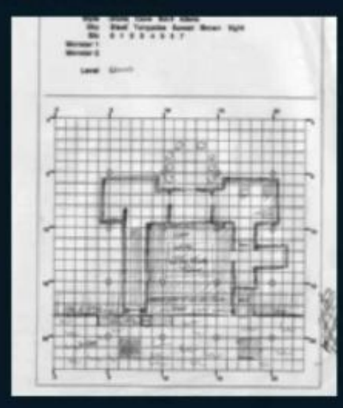
> **"I wasn't even a writer at DMA to begin with. I was some kind of graphics guy porting visuals"**
> Steve Hammond recalls his early days at DMA

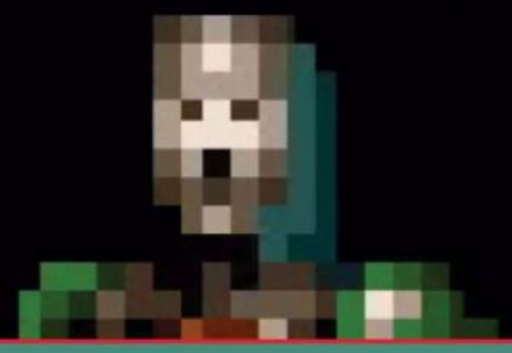


MASTER OF THE UNIVERSE

A rare look at the design documents of Hired Guns

As creator of the timeline, story and solar system for *Hired Guns*, Steve Hammond is in possession of a lot of material used during the development of the game which has never seen the light of day. As a writer, graphician and all round good guy, Steve has given us access to his collection of never before seen material including a map design, a sketch of the mercenaries' drop ship and his developmental work for the manual, all typeset on the Amiga. In fact Steve still has his Amiga development kit and boldly claims his devotion to the platform "The Amiga was the best home computer ever made!"





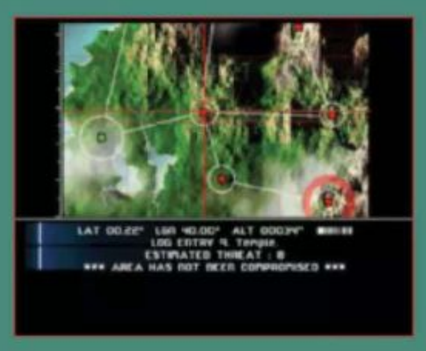
TEN DEFINING HIRED GUNS MOMENTS

THE INTRODUCTION SEQUENCE

1 The opening of the game creates a wonderful feeling of suspense with a brilliant electronic score by Brian Johnston. It's so good it would make Kraftwerk turn grün with envy.

THE ABANDONED DEPOT

2 The first mission of the campaign is beautifully tense as the music stops, leaving only the sound of a dark ambience. It's time to creep into the depot and confront the unknown.



NAVIGATING GRAVEYARD

3 The overworld map allows the player to select their own route through the campaign on this moon. The experience is accompanied by the sounds of thunder and howling winds.

DEPLOYING THE AUTO SENTRY KIT

4 This is one of the most fun weapons to employ. The kit acts as a turret, blasting anything in its path. This can lead to the breakdown of friendships during co-op play.

USING PSIONIC AMPLIFIERS

5 The psi-amps allow you to use abilities, offering solutions to fighting and puzzles. Abilities such as electrocution and breathing underwater are a few at your disposal.

▶ proven to be unfaked. I'm rather pleased that twenty years after I wrote the idea, cameras like this actually exist."

Even with the creative exclusions, Steve and the team used a wealth of influences during development. "We had to go to the library as there was no such thing as the Internet," recalls David, who named H.R. Geiger as an artistic inspiration. Steve delved into a range of written works. "At the time I started jotting down initial notes, I was reading Iain M. Banks' *Consider Phlebas*, which centred on a group of mercenaries. One additional influence was the politically aware *2000AD* spin off *Crisis*, in particular a Pat Mills strip called *Third World War*. The character of Eve made an impression on me and it was with her in mind that I created Cheule Siygess, who was certainly the protagonist as far as the overall story was concerned." Steve is also quick to mention the extent of Scott Johnston's reading. "Scott did research on the weapons, naming them too. I remember seeing a small libraries worth of books on his desk describing all kinds of firearms!"

Although research and development proved enjoyable, the run up to release was a trying experience. One stumbling block was the character illustrations, which the player models would be based on. "I described all of the characters to our illustrator who then proceeded to ignore everything I'd said, and then made a set of twelve character drawings which didn't resemble the descriptions. Deadlines on the manual meant we'd no choice but to use those and so I assigned each to the character which vaguely fitted," Steve says. "This had one important consequence: I'd described Cheule, as having a resemblance to Grace Jones. What I ended up with was a blonde with a new-wave hairdo. So it kills me, absolutely kills me, that we could have had a black female protagonist in a computer game... in 1993! I am sure that would have been a world first."

» The levels for *Hired Guns* possess huge variation, requiring the player to traverse a number of unique areas.

> **"I think at the time they only wanted to promote Lemmings sequels"**
> Steve recalls that *Hired Guns* was a tough sell

» The concept for the character of Cheule (left) and the final design (right). The resemblance is uncanny, right?

» Items can be damaged by factors such as water, turning them into "unidentifiable remains".

Another annoyance was the game's publisher, Psygnosis. "I'm pretty sure they didn't really care for [*Hired Guns*] that much. A perfect example of this was the manuals and storybook which came with the game. Scott wrote a whole pile of notes for the instructions. He was appalled to see that they'd just cut and pasted his notes wholesale, without any attempt at editing. And we never got to see any proofs. The first we saw of it was our complimentary copy. Scott wasn't as pissed off as I was though; my story and background had the punctuation missing. What made this particularly galling was Psygnosis urgently shouting about a deadline for the text a few weeks hence, then when I sent it to them they sat on the whole thing for eleven months. Just speculation, but I think at the time they only wanted to promote *Lemmings* sequels."

Although *Hired Guns* received critical acclaim upon release, it failed to do as well as was hoped. The reason? "Timing," explains Steve. "*Hired Guns* was released in

GATHERING THE FUSION RINGS

6 Four fusion rings are needed to complete the campaign. The levels that house them are some of the most tense in the game, laying on disturbing noises that only ramps up the tension.

FOUR PLAYER CO-OP

7 Gathering four of your friends or whoever is around at the time for *Hired Guns* creates one of the best multi-player experiences in gaming. You experience the excitement and cohesion of a mercenary squad.

FINDING A LEMMING

8 Oh no! Even these critters managed to make their way in, but only in the short challenge levels. Although more aggressive and less suicidal, blasting one straight in the face does provide a strange sensation.

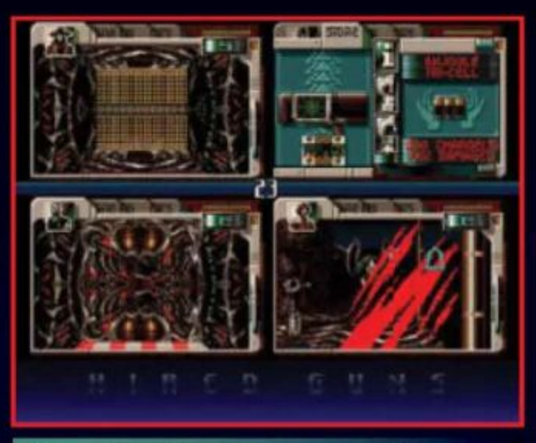
PUZZLE SOLVING

9 Graveyard is filled with conundrums during exploration which require you to bypass force fields, open locked doors and move blocks to open new paths, all whilst watching your back for bio-weapons.

VICTORY!

10 The *Hired Guns* campaign is one that tests your mettle. On completion of the last level, you are greeted with the sight of an explosion followed by each character ending. You did it! It's time to feel proud.

» You will need to manage your inventory as well as carrying capacity between your team.



» These short action challenge maps allow for more quick play sessions than extended adventure.

1993 when two important events happened. The first was *Doom*. Graphically it was a big leap forward when PCs were starting to overtake the Amiga in power, and even though it was a different style of game, it sucked up the press. The second event was *Frontier: Elite II* which had been in development for nine years and was possibly the most anticipated release on the Amiga ever. We were unlucky that it was released at the same time."

However, a few years later Devil's Thumb Entertainment (the American branch of DMA) began development on a *Hired Guns* follow up. "The idea was that it would be a remake, using modern technology in the form of the Unreal engine, rather than a sequel. By this time Scott had moved on so I was the game designer by default. At least to begin with, though this is considerably overstating that role," Steve tells us. But the fact that the licence didn't belong to the head branch of DMA Design caused complications. "I had the choice of either giving up my involvement, or quitting and going freelance to keep working on it, with the promise of more work after."

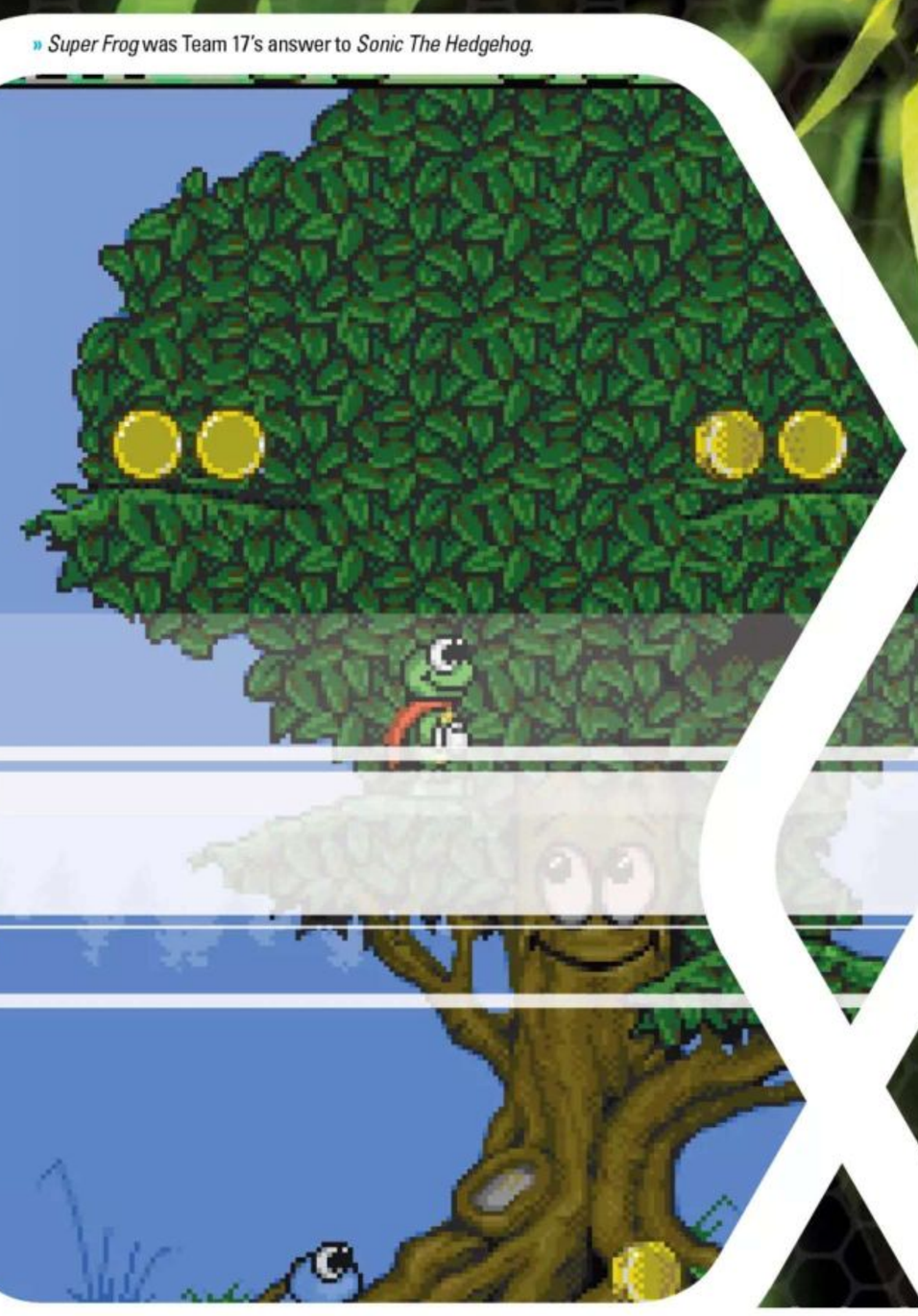
Unfortunately, this all turned sour quickly. "All of my universe was being eroded by the powers that be. To give you an example, one of the first things their in-house writer suggested was that Cheule have a glass plate in her forehead. My intro script was rejected for being - can you believe this? – 'too cinematic'". But the misguided ideas didn't stop there. "I was also told we needed a lot of one-liners. The CEO wanted three thousand. You heard that right. After all, if *Duke Nukem* had a dozen smartarse one-liners, *Hired Guns* should have three thousand. And he didn't want a female lead character. Right at the height of *Tomb Raider*'s fame he didn't want a female lead." Steve has the playable build (which can be found in the deep reaches of cyberspace) but has never tried it. "I can't bear to see what sort of damage they've done."

However, when asked about the subject of a re-make, Steve's enthusiasm has not waned. "I would love to be the equivalent of a writer/director or even just a scriptwriter. The best part would be integrating the story and background within the game itself rather than having it as a separate artefact in the shape of a manual. And then I would be able to tell you what happened next!" Unfortunately, no further action on the game has occurred as the licence belongs to Sony, due to Psygnosis becoming Sony Computer Entertainment Liverpool in 2001. "The fact that Sony hold the IP has held me back from doing anything in a serious manner. So Sony, how about it, eh? Now that is something with an absolute zero chance of happening!" Well Sony, would you like to prove him wrong? ✱

» A DMA Design studio head described the unreleased sequel of *Hired Guns* as "okay". This is more than fair.

DEVELOPER LOOKBACK

Now in its 26th year, Team 17 is one of Britain's few surviving game is fondly remembered for its technical achievements speak to Ashley Day about the early days of the Amiga's



» *Super Frog* was Team 17's answer to *Sonic The Hedgehog.*

DEVELOPER LOOKBACK

TEAM 17

Team 17 started life on 5 December 1990 when Martyn Brown of 17 Bit Software, a successful shareware distributor, decided that he and a few like-minded Amiga enthusiasts could offer exciting, new games that took full advantage of the machine they loved so dearly. "As Amiga nuts and games nuts we were a little sick of the crappy ST ports that were coming out for the Amiga and wanted to do classic games that made the most of the hardware and delivered the spirit we felt was lacking," explains Martyn to us. "It was just one of those decisions when we decided to go for it and the team from 17 Bit became Team 17."

Martyn Brown and fellow 17 Bit member Rico Holmes set about assembling a super-developer made up of the most talented and passionate members from the Amiga demo scene. It became clear from the outset that each member's love for the Amiga platform would feed into their games. "The Amiga was always very special to us and we had a brilliant time developing games for it," recalls Martyn. "It wasn't a job as such, it was just enthusiasm carrying us along in those days." Due to the widespread popularity of Commodore's computer across mainland Europe, many of the Team resided on the continent and chose to work at a distance from the Yorkshire HQ. Martyn didn't see it as a problem: "To be honest, it was easier that way. Essentially what we had were a number of satellite studios, even if they were based in bedrooms/homes around the UK and substantially, Sweden. It just meant I spent a bit of time on the road, it never felt like a problem, even if it was before Email/Internet was widely used. We had 14.4K and (later 56k) modems – which were the dogs at the time."

With the fresh-faced and enthusiastic team in place it was soon time to begin work on their first professional title. *Full Contact*, a realistically styled one-on-one fighter, was released in the spring of 1991 and went straight to the top spot of the Amiga charts despite mass distribution of a pirate copy that erroneously credited the developer as 'Team 7'. At the budget price of £9.99 the game was an attractive purchase and very lucrative for Team 17, who decided to self publish and not lose out on any sales revenue. The strategy proved very useful for the team, as it was better able to finance future projects and, without a clueless publisher breathing down its neck, was free to create whatever it liked.

That creative freedom would pay off in a big way with Team 17's next and arguably best game: *Alien Breed*. Amiga Power described Breed as: "A very sophisticated game exploiting the ability of the Amiga to its fullest in both looks and gameplay". The review was typical of the general reaction to *Alien Breed*, the public went mad for Team 17's addictive blaster and bought enough copies to keep *Alien Breed: Special Edition* at the top of the Amiga's budget chart for over 33 weeks, an incredible achievement.

Following *Alien Breed* were a string of Team 17 hits, most notably the *Strider*-esque platform game *Assassin* and the *Gradius*-inspired *Project-X*. In two short years Team 17 had grown from a miniscule shareware distributor into one of Britain's biggest software talents. With each new game showcasing arcade quality graphics and

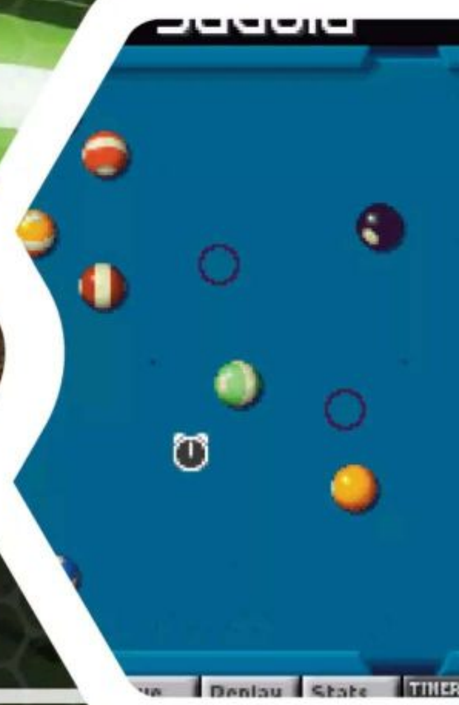
IN BRIEF

Starting life as a humble distributor of shareware and demos, Team 17 became one of the most prolific Amiga developers and publishers of the early nineties. Early titles like *Alien Breed* and *Superfrog* brought Team 17 fame until its breakthrough hit, *Worms*, brought it fortune. Team 17's early years as a self-funded developer paved the way for the independence it enjoys today and its status as a celebrity publisher in the Amiga days had talented artists and coders queuing up to make games for the teamsters.

TEAM 17

independent developers. From Alien Breed to Worms, each and addictive gameplay. Martyn Brown and Marcus Dyson most cherished developer

» Full Contact was Team 17's very first game. It's pretty isn't it?



gameplay it was amazing that the team had managed to remain exclusive to the Amiga. Martyn had considered other platforms but Team 17 would not go multi-format for several years. "We almost went Mega Drive at one point in '92, to the extent that we almost left the Amiga altogether, such were the offers. However, we enjoyed our publishing position too much."

With Team 17 now well established as a successful Amiga publisher they had begun to publish the games of other developers. *Assassin*, developed by Psionic Systems, was the first of many yet, unlike other publisher/developer relationships, Team 17 worked much closer with the developers. Staff from Team 17 would often assist the developer or the Team would permanently recruit some developers into the main group. Allister Brimble composed the music for *Assassin*, for example, no doubt due to his relationship with Team 17 after writing the soundtrack to *Alien Breed*. With fresh talent from the Amiga scene coming and going through Team 17's doors, the publisher felt like a special club that everyone could be a part of. Legendary Amiga animator Eric Schwartz created a brilliant intro-sequence for *Superfrog* and freelance programmer Jamie Woodhouse was temporarily brought into the Team 17 fold to make *ATR* and *Qwak*: a particular favourite amongst Team 17's staff.

By 1993 Team 17 had hit its stride and released a staggering ten games and five compilations in the space of 12 months. It wasn't a case of quantity over quality though, as those releases included memorable games like *Alien Breed II*, *Superfrog* and *Body Blows*. In recognition of its swift growth and large output in 1993 Team 17 won a Publisher of the Year award, which it shared with the monolithic Electronic Arts. Just one of the achievements that Martyn Brown is proud of: "There are many, First Game, First Number One, the original *Alien Breed*, *Superfrog* and *Body Blows*... The feeling that *Arcade Pool* got". Things couldn't have been more promising for the rapidly maturing developer but the events of the following months were to cast a shadow over the Amiga scene that would threaten the continued production of Team 17's Amiga games.

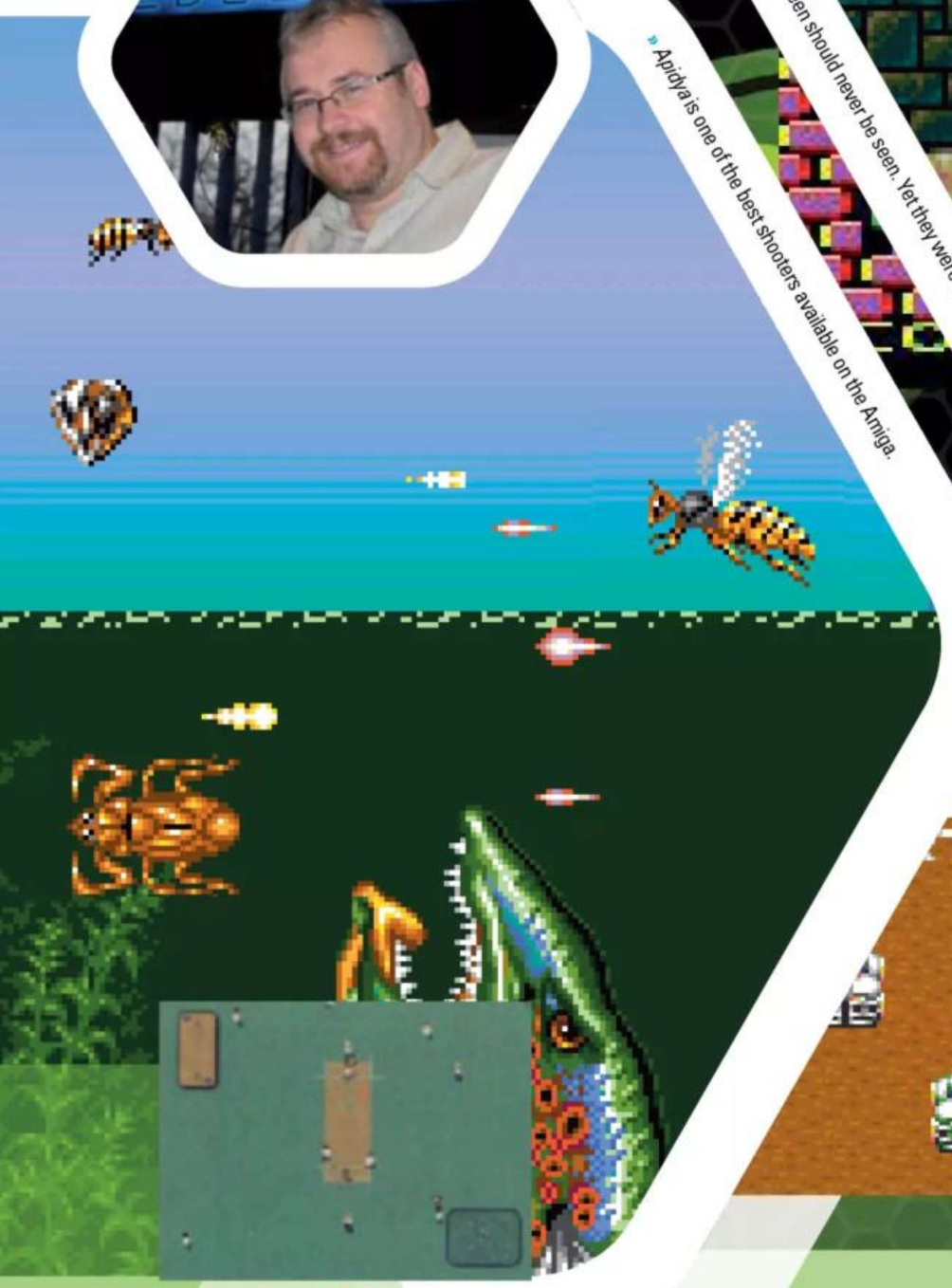
Following the failure of Commodore's consolised Amiga 1200, the CD32, the giant computing firm was in serious trouble. Sales were falling, piracy was high and too much profit had been invested in new models of Amiga that nobody wanted. In April 1994, Commodore filed for bankruptcy and production of all Amiga hardware came to an abrupt halt. The Amiga's future looked bleak but, remarkably, new games kept coming. The A1200 was a little over a year old with vast quantities of untapped potential, its position as a powerful home computer also meant that it had a large user base who were still willing to buy new software. Team 17 decided to stick with the Amiga for the time being and it was in this period that its best ever games were made.

Seeing that the Amiga market was about to go through serious upheaval after the fall of Commodore, Marcus Dyson, the editor of Amiga Format decided that a change in career was needed and left the world of publishing to join the ranks of Team 17. "It was apparent that the Amiga was in decline," says Marcus. "I thought, and in the end it turned out not to be true, that Team 17 would continue to be involved with the Amiga for longer than Future Publishing did." Moving back to

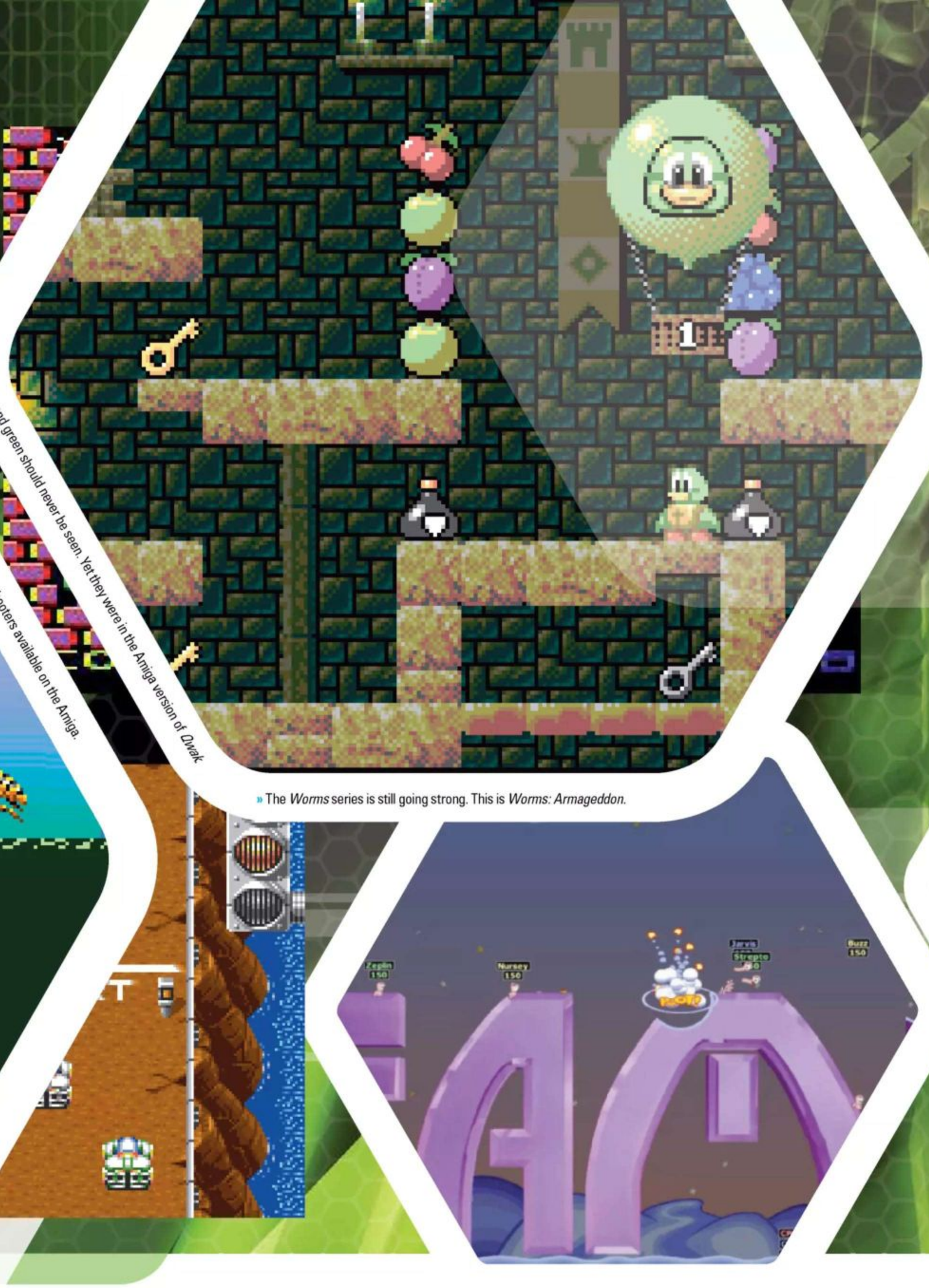
WORMS RULES

To this day, *Worms* remains Team 17's strongest and most successful franchise. What's interesting is that the concept behind *Worms* isn't really that original, as it shares lots of familiarities with *Scorched Tanks* and other artillery games. The genius of creator Andy Davidson however was that adding worm antagonists and creating a selection of crazy weapons instantly made it stand apart from its numerous peers. Developers Rovio pulled a similar trick with *Angry Birds* many years later.

The success of *Worms* resulted in many different games and spinoffs, from the inevitable *Worms 2*, to *Worms Golf* and *Worms Pinball*. While the series hasn't translated too well into 3D, the 2D games are pure gold and it remains an utterly superb multiplayer game. The timeless nature of the game and the immediate appeal of its characters has ensured that the franchise has gone from strength-to-strength in the last 20 years with estimated sales of over 14 million units.



» *Apidya* is one of the best shooters available on the Amiga.



» Pink and green should never be seen. Yet they were in the Amiga version of *Qwak*

» The *Worms* series is still going strong. This is *Worms: Armageddon*.

CANNED GOODS

Every developer has a few unfinished works locked away in the vault and Team 17 is, as you would expect, no exception. Some, like the new *Alien Breed* and *Superfrog* games, never made it past the concept stage whilst others were shown off in magazines and adverts only to mysteriously disappear. *Final Over Cricket*, a *Sensible Soccer*-style cricket game, was canned in 1994 when the coder unexpectedly decided to stop working on the game. As one of Team 17's satellite developers, they could do nothing about his disappearance and had to forget about the promising title.

King of Thieves was intended to be a medieval spin on *Alien Breed* games but was cancelled in 1996, as was *Pussies Galore*, a cheekily titled platform game. "*Pussies* and *King Of Thieves* were canned because we didn't feel they were going to be great games," says Martyn. We imagine they're no great loss then, although *Final Over Cricket* does look as though it would have been brilliant fun.

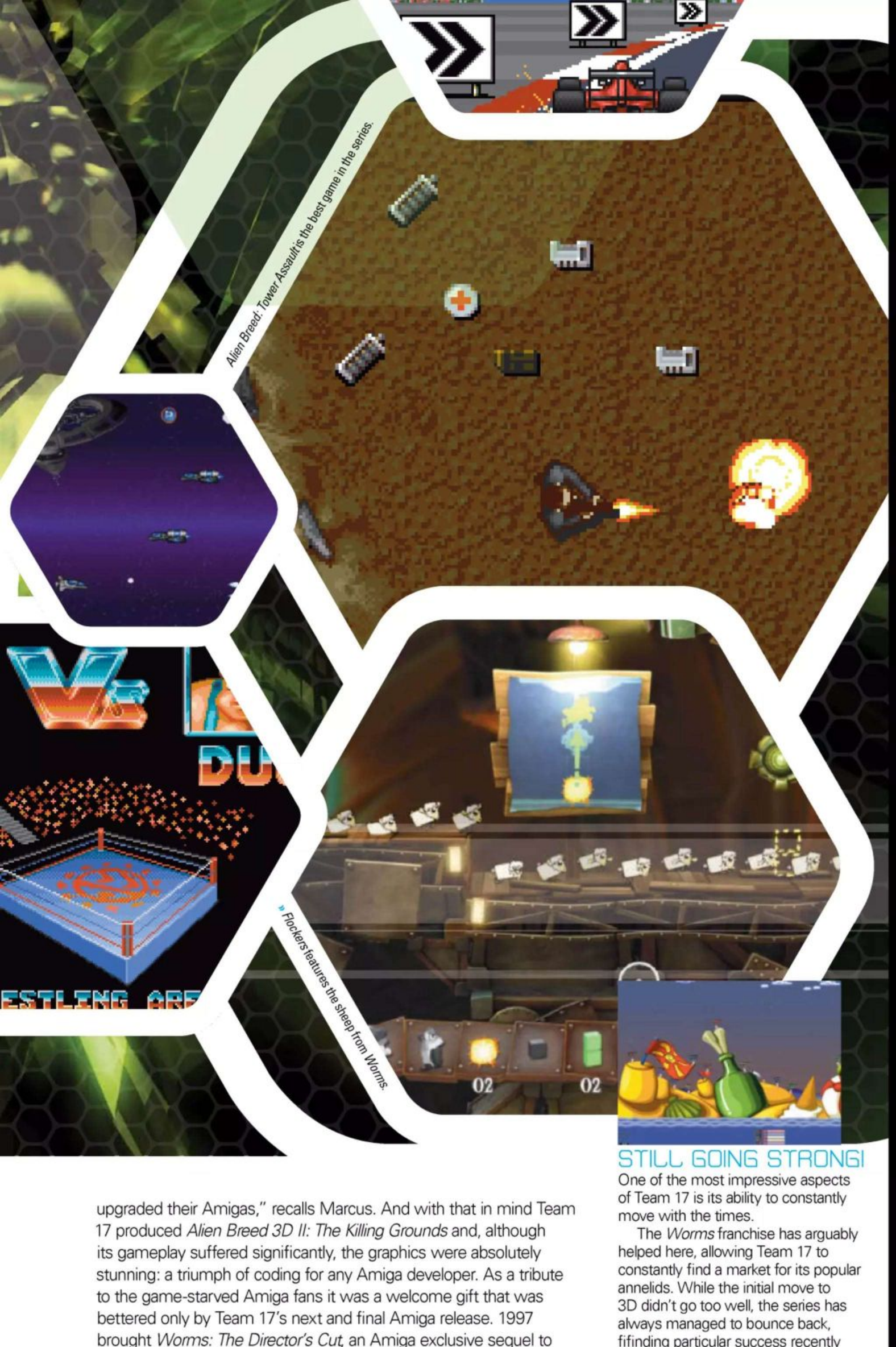
his Wakefield home was the icing on the cake. "It was easy to move back here and it enabled me to hang out with my old friends and it was also a pleasure to see a publisher out of Wakefield doing well."

Marcus began his career at Team 17 as Project Manger on *Alien Breed Tower Assault* and was immediately thrown into the Team's unique method of development. "It was part of the company's culture that everybody was involved in everything and because I had a background in graphic design I'd help out with map and packaging design whenever there was an opportunity." Marcus also appeared in the infamous FMV introduction to the CD32 version of *Alien Breed Tower Assault*, the low-budget space opera was as embarrassing then as it is now. "Someone said it was like the cast of Emmerdale doing *Star Wars*, which I think is racist," laments Marcus. "You know, we're Northerners but we're proud of the fact."

Marcus' contributions to Team 17's projects became much more instrumental to the developer when its most successful game hit a stumbling block before it had even been released. During Marcus' time as editor of Amiga Format, the magazine ran a competition where readers had to create a game in Blitz Basic. Andy Davidson, an artist and Amiga nut from Bournemouth, submitted *Total Wormage*: the demo that eventually became *Worms*. Ironically enough, the game slipped through the judges' net and went completely unnoticed. It wasn't until the following ECTS that Andy had the chance to personally force them to play his game and Team 17 realised the game had to be published. 14 months later the reprogrammed and re-titled *Worms* was ready to take over the world but one thing stood in their way. When Andy told the Team that he had originally submitted the game to Amiga Format's competition Marcus quickly realised, with horror, that every demo submitted to the magazine automatically became the property of Future Publishing. Cunningly, Marcus managed to get Amiga Format to transfer all the rights to *Total Wormage* before anyone knew how much of a success Worms would be. "Since I had only recently left Future, I called Greg Ingham, and asked him if he had any objection to us using the game. He said no and the day was saved." It was a move that proved great for Team 17 and, in hindsight, not so good for Future…

After achieving worldwide acclaim for the Amiga version of *Worms* in 1995, Team 17 wisely decided that now was the time to go multi-format. Unfortunately, not everyone agreed. Marcus tells us: "Sony didn't want to take *Worms* at all". Every other platform signed up to Worms. They came along, looked at the game and said 'That's great'. 3DO were literally beating the door down to get *Worms*, but Sony said 'No. The policy is 3D games only". Hence you got *3D Lemmings*, the game that effectively killed off the franchise." Fast-forward to 2005 and Team 17 have ironically found itself developing a 2D version of *Lemmings* for Sony's new PSP.

Needless to say, Sony wasn't stupid enough to turn down a game that had sold in excess of 5 million copies and soon relented on its policy. The rest is history: Team 17 went from being heroes of the Amiga scene to world-renowned videogame developers almost over night. A successful PC and console career was calling but Team 17 weren't done with the Amiga yet. "There was a distinct feeling in the company that we ought to give a showcase to the people that had



upgraded their Amigas," recalls Marcus. And with that in mind Team 17 produced *Alien Breed 3D II: The Killing Grounds* and, although its gameplay suffered significantly, the graphics were absolutely stunning: a triumph of coding for any Amiga developer. As a tribute to the game-starved Amiga fans it was a welcome gift that was bettered only by Team 17's next and final Amiga release. 1997 brought *Worms: The Director's Cut*, an Amiga exclusive sequel to *Worms* that was as much a treat for Amiga owners as it was for creator Andy Davidson. Marcus tells us: "*Director's Cut* was really more about Andy being given a free reign to do whatever was in his slightly strange brain". *Worms: DC* was a critical success but only sold 4000 copies at retail. Due to the Amiga's diminishing popularity, Martyn Brown decided to end Amiga production for good and concentrate on the expanding console and PC sector. "We had grown up with the Amiga but we weren't all enthusiastic teenagers anymore, we'd got wives, kids and mortgages – we couldn't just do stuff for the love of it".

Since then a number of *Worms* sequels have followed but the move to 3D has failed to recreate the magic of the original game. The sun has set on Team 17's classic period but a new age is dawning. New 2D versions of Worms will soon hit the handhelds and Team 17 has returned to its roots with a remake of the Amiga classic *Lemmings*. Martyn Brown is optimistic about the future. "We've poured a lot of tender TLC into *Lemmings* and we're sure it'll be a massive hit on PSP." As for their own franchises, "*Alien Breed*... Lets see, that might be worth a shout," he says with a smile.

STILL GOING STRONG!

One of the most impressive aspects of Team 17 is its ability to constantly move with the times.

The *Worms* franchise has arguably helped here, allowing Team 17 to constantly find a market for its popular annelids. While the initial move to 3D didn't go too well, the series has always managed to bounce back, fifinding particular success recently on platforms such as Steam, iOS and Android. In fact, moving to digital sales has helped Team 17 enormously in recent years and it has also allowed the company to resurrect several of its classic franchises with various degrees of success.

Alien Breed Evolution was released in 2009 and received an updated version called *Alien Breed: Impact* in 2010. Impact was followed by *Assault* and *Descent* in the same year. The developer also released a new version of *Super Frog in HD* in 2013, but this time there wasn't a bottle of Lucozade in sight.

More recently, the developer has reinvented itself, and has began to concentrate on finding and publishing new original indie projects, with titles such as *The Escapists* and *Light*. Effectively the studio has come full circle, mirroring its early Amiga days.

SOFTOGRAPHY

1991

Full Contact
System: Amiga

Alien Breed
System: Amiga, PC

Alien Breed Special Edition '92
System: Amiga, CD32

1992

Project-X
System: Amiga, CD32, PC

Assassin
System: Amiga

1993

Alien Breed II: The Horror Continues
System: Amiga, CD32

Superfrog
System: Amiga, CD32, PC

Project-X Special Edition
System: Amiga

Qwak
System: Amiga, CD32

F17 Challenge
System: Amiga, CD32

Apidya
System: Amiga

Cardiaxx
System: Amiga

Overdrive
System: Amiga, PC

Body Blows
System: Amiga, PC

Silverball
System: PC

1994

Arcade Pool
System: Amiga, CD32, PC

Super Stardust
System: Amiga, CD32

Body Blows Galactic
System: Amiga

Alien Breed: Tower Assault
System: Amiga, CD32, PC

Assassin Special Edition
System: Amiga

Ultimate Body Blows
System: CD32, PC

1995

The Speris Legacy
System: Amiga, CD32

Kingpin: Arcade Sports Bowling
System: Amiga, CD32, PC

ATR - All Terrain Racing
System: Amiga, CD32

Worms
System: Amiga, CD32, PC, Mega Drive, Saturn, Jaguar, Mac, PlayStation, Game Boy, SNES

Alien Breed 3D
System: Amiga, CD32

1996

Alien Breed 3D II: The Killing Grounds
System: Amiga

World Rally Fever
System: PC

X2
System: PlayStation

1997

Worms: The Director's Cut
System: Amiga

Worms 2
System: PC

1998

Addiction Pinball
System: PC

Nightlong: Union City Conspiracy
System: PC, Amiga (Converted by ClickBOOM in 1999)

1999

Arcade Pool II
System: PC

Phoenix
System: PC

Worms Armageddon
System: PC, PlayStation, Dreamcast, Nintendo 64, Game Boy Color

Worms Pinball
System: PlayStation

2001

Worms World Party
System: PC, Dreamcast, PlayStation, Game Boy Advance, N-Gage, Gizmondo

Stunt GP
System: PC, Dreamcast, PlayStation2

2002

Worms Blast
System: PC, Mac, GameCube, Game Boy Advance, PlayStation2

2003

Worms 3D
System: PC, PlayStation 2, Xbox, GameCube, Mac

2004

Worms Forts: Under Siege
System: PC, PlayStation 2, Xbox,

2005

Worms 4: Mayhem
System: PC, PlayStation 2, Xbox

2006

Lemmings
System: PSP

Worms: Open Warfare
System: PSP, DS

2007

Worms
System: Xbox Live Arcade, PSN, iOS

2008

Worms: A Space Oddity
System: Wii, Mobile devices

2010

Alien Breed Evolution/Impact
System: PC, PlayStation 3, Xbox 360

Alien Breed 2: Assault
System: PC, PlayStation 3, Xbox 360

Alien Breed 3: Descent
System: PC, PlayStation 2, Xbox, Publisher: Sega

Leisure Suit Larry: Box Office Bust
System: PC, PlayStation 3, Xbox 360

Worms: Battle Islands
System: PSP, Wii

Worms: Reloaded
System: PC, Mac, IOS

2011

Worms Crazy Golf
System: PC, Mac, IOS PlayStation 3

Worms Ultimate Mayhem
System: PC, Xbox 360

2012

Worms: Revolution
System: PC, PlayStation 3, PS Vita, Mac, Xbox 360

2013

Superfrog HD
System: PC, PS Vita, PlayStation 3

Worms 3
System: IOS, Android, Mac

2014

Worms: Battlegrounds
System: PlayStation 4, Xbox One

Worms: Open Warfare
System: PSP, DS

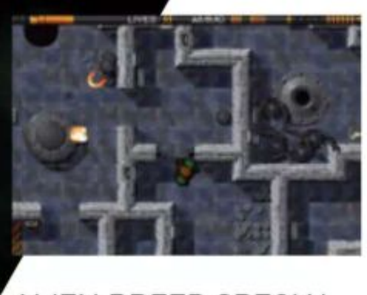
Timeline

With over 60 games to its name, there are plenty of Team 17 titles to choose from. Here are all its Amiga releases from 1991 to 1999

1991

FULL CONTACT [1991]
Systems: Amiga 500
Team 17's demo background shone through in the amazing intro sequence to this one-on-one fighting game. Gameplay left a lot to be desired, however, and paled in comparison to the superior *IK+*. The introduction, realistic graphics and brilliant soundtrack are all still great now, but this really isn't worth playing and, as Team 17's debut title, it showed little sign of the brilliance that was to come.

ALIEN BREED
[1991]
Systems: Amiga 500
Rico Holmes and Andreas Tadic fused *Gauntlet* with *Alien* to create one of the greatest co-operative games on the Amiga. Some prefer *Chaos Engine* for the run 'n' gun fun but *Alien Breed's* emphasis on complicated mazes, ammo conservation and the smart use of keys made it far more playable. The atmospheric graphics and music made *Alien Breed* that much more compelling to play but, at only six levels long, the experience was a short-lived one.



ALIEN BREED SPECIAL EDITION '92
[1992]
Systems: Amiga 500, CD32
With a true sequel to *Alien Breed* still several months away, Team 17 decided to keep the fans happy by releasing this extended version of the original. Now with 12 full levels, the game was twice the size of its predecessor and all the better for it. For those dying to play the first *Breed* this is the best version to go for and much easier to find than the original these days.

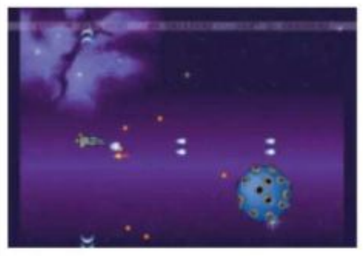
PROJECT-X
[1992]
Systems: Amiga 500, CD32, PC
Team 17 was a huge fan of arcade-style games and no other title proved it more than *Project-X*. Essentially a clone of Konami's *Gradius*, *Project-X* was a horizontal shooter with selectable power ups. It distinguished itself from the Japanese hit by allowing you to upgrade your selected weapon several times to the point where bullets and lasers filled the screen. An unmistakably European techno soundtrack rounded off an excellent shoot-'em-up.

ASSASSIN
[1992]
Systems: Amiga 500
"Although this game bears many similarities to Strider, it's actually a lot better" (CU Amiga Nov 92). Darran's probably spitting blood at the sight of that quote right now and he'd be right to do so. *Assassin's* wall hanging antics were more than a little similar to the Capcom classic and, whilst it was a very enjoyable Amiga game, it certainly wasn't a *Strider* beater. Think of this more as a fun homage.

1992

ALIEN BREED II - THE HORROR CONTINUES
[1993]
Systems: Amiga 500, Amiga 1200, CD32
From the moment *Alien Breed II* started to its final levels the action was a non-stop, pure adrenaline rush. Aliens could fire back, helicopters swept the planet's surface with deadly aim and levels self-destructed with dramatic timing. This was heart-pounding gameplay at its finest and yet another flawless episode in Team 17's signature blastathon. The A1200 version had better graphics but was much more difficult and prone to occasional slowdown.

SUPERFROG [1993]
Systems: Amiga 500, CD32, PC
While some saw Zool and James Pond as the Amiga's best platform mascots it was the Lucozade guzzling Superfrog that stood out from the crowd. Tight controls and an excellent theme tune (from Allister Brimble again) made *Superfrog* much more fun to play. Levels were packed with secret areas and interspersed with a great little fruit machine simulator that added a distinctly British touch to the game.



PROJECT X SPECIAL EDITION [1993]
Systems: Amiga 500
Unlike *Alien Breed Special Edition* this didn't feature any extra levels at all. Instead Team 17 had listened to complaints that the original *Project X* was too hard. It was much easier to power up the craft this time around and, in comparison to the original, you lost less firepower every time you died. This was a great way to see the beautiful later levels that were too hard to reach in the original.

QWAK [1993]
Systems: Amiga 500, CD32
Originally a BBC Micro game by Jamie Woodhouse, this 16-bit upgrade was a highly addictive single-screen platformer in the same vein as Taito's *Bubble Bobble*. This is definitely one of the most colourful games to appear on the Amiga and also one of the most playable. It's a shame that this charmingly old-school platformer never really got the attention it deserved as it's definitely one of Team 17's greatest releases.

F17 CHALLENGE [1993]
Systems: Amiga 500, CD32
Looking much more like something Sega would make than the typical Amiga developer, *F17 Challenge* was initially eye-catching and very arcade-like. The game was fast and fun with yet another great soundtrack but lacked the depth to keep players entertained for more than a couple of evenings. But at a price of £12.99 who really had the right to complain about longevity? Not us.

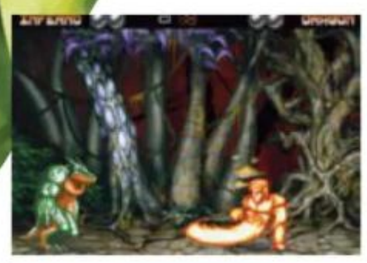
APIDYA [1993]
Systems: Amiga 500
Team 17 had nothing to do with the development of this side-scrolling shooter as it had already been published by someone else a year or so before. Despite that, *Apidya* fit into the Team 17 catalogue very comfortably as it played similarly to *Project-X* with the exception that you took control of a wasp and had to blast through other insects in the garden. Think *Gradius* crossed with *Buck Bumble* and you'd be spot on.

CARDIAXX [1993]
Systems: Amiga 500
Yet another shoot-'em-up from Team 17. The usual Team 17 guys didn't develop *Cardiaxx*, as it was a budget re-release of an Eclipse Design game, and lacked the flair of the developer's internal projects. *Cardiaxx* played like a cut down version of *Defender* and was remarkable only for the inexplicable way it displayed the score right in the middle of the screen.

OVERDRIVE [1993]
Systems: Amiga 500, PC
A racing game that was an awful lot like *Micro Machines* with the exception that it was about as enjoyable as eating a pair of dirty underpants. The biggest problem was that it ran so quickly that it was impossible to take a corner properly unless you knew it was coming. This effectively made *Overdrive* a memory test that, once each track was committed to the grey matter, actually required no skill whatsoever.

BODY BLOWS [1993]
Systems: Amiga 500, PC
The original *Body Blows* was hailed as a *Street Fighter* beater by the specialist press back in 1993. Going back to the game now though, we have to wonder just what they were thinking. The loading times are unbearably slow and the animation rather turgid. Worst of all, with only one fire button, the attacks feel limited and cumbersome. The only *Street Fighter* this was better than was the C64 version.

1993



BODY BLOWS GALACTIC [1994]

Systems: Amiga 500

Body Blows Galactic, like its predecessor, looked great and begged to be liked. Great graphics do not make a great game though and, aside from the science fiction theme, there was little to differentiate this from the lacklustre original. Check out *Shadow Fighter* or *Fightin' Spirit* if you're after an Amiga brawler that actually plays as well as it looks.

ASSASSIN SPECIAL EDITION [1994]

Systems: Amiga 500

You've got to love Team 17, just for never giving up. *Assassin Special Edition* had tighter gameplay than the original and was a full £15 cheaper. The main difference was that the default weapon had been changed from a boomerang to a gun. This made the pace of the game much quicker and the difficulty a little fairer. *Assassin* was now a fairly enjoyable game...but it still wasn't better than *Strider*.

THE SPERIS LEGACY [1995]

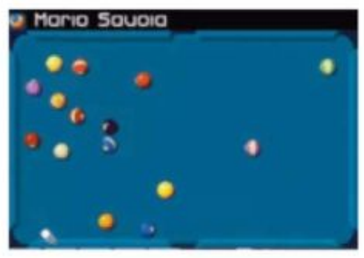
Systems: Amiga 1200, CD32

Team 17's habit of cloning popular Japanese titles really didn't pay off this time: nobody can out-*Zelda* Nintendo and only a fool would try. Graphically this looked very similar to *Link To The Past* but lacked much of the charm of the classic SNES game. *The Speris Legacy* ultimately failed because it couldn't replicate the expertly formed structure of *Zelda's* exploration/combat/item-collection cocktail.

ALIEN BREED 3D II: THE KILLING GROUNDS [1996]

Systems: Amiga 1200

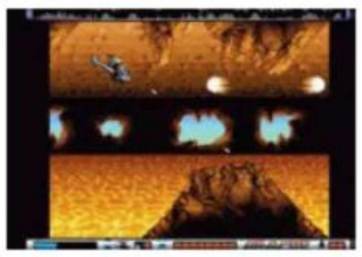
Ambition can be a terrible thing. Having mastered the *Doom* clone with *Alien Breed 3D*, Team 17 wanted to make an FPS to rival *Quake*. It got the engine running but, even on expanded machines, the Amiga coughed and spluttered under the strain. Poor AI and a steep difficulty curve ganged up with a sluggish frame-rate to punish anyone who dared to play. Most struggled, or couldn't be bothered, to play past level one.



ARCADE POOL [1994]

Systems: Amiga 500, CD32, PC

Whilst games like *Jimmy White's Cueball* had much better graphics there was still little to complain about when it came to *Arcade Pool*. Presentation may have been a little basic but the physics were spot on and the use of just two mouse buttons to play kept things just the right side of simple. *Arcade Pool* is notable for its realistic crowd noises that, if you listened carefully, contained actual snippets of conversation.



APACHE [1994]

Systems: Amiga 500

Apache was a horizontal shooter in which you had to pilot a helicopter, rescue civilians and carry them back to base. The game was created by the same coder and artist who made *Assassin* and was given away free with *Body Blows Galactic*. Although it's always good to get something for free, Apache's short levels and sloppy controls made it quite a poor gift.

ULTIMATE BODY BLOWS [1994]

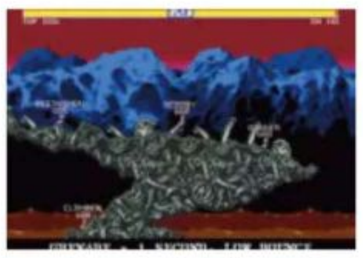
Systems: CD32, PC

Team 17 tried, for the third and final time, to get the *Body Blows* formula right with this special CD32 edition. The roster combined combatants from *Body Blows* and *Body Blows Galactic* whilst the controls were spread over the joypad's four face buttons. The same old problems reared their ugly heads though: combat was still awkwardly stilted and unbalanced whilst the move to CD did nothing to speed up the loading times.

ARCADE SNOOKER [1995]

Systems: Amiga 500

Back when cover-mounted disks were something special, Team 17 knocked *Arcade Snooker* together to be given away free with the July '95 issue of CU Amiga. This was nothing more than a reworked version of *Arcade Pool* but it was a full game nonetheless. It played well and, as a freebie, was a great example of the developer's love for the Amiga community.



WORMS [1995]

Systems: Amiga 500, CD32, PC, Mega Drive, Saturn, Jaguar, Mac, PlayStation, Game Boy, SNES

The game that put Team 17 on the map! Andy Davidson's *Total Wormage* went from Blitz Basic demo to multi-format success over night, largely because of Davidson's quirky British humour but also because of the hard work that went into creating a game engine that stood up to countless hours of multi-player mayhem. The Amiga version remains the best to this day thanks to the ability to create new levels in Deluxe Paint.

WORMS: THE DIRECTOR'S CUT [1997]

Systems: Amiga 1200

The Team's last true Amiga game was a farewell gift to the community that had supported it for the past seven years and is widely regarded as the definitive *Worms* game. Andy Davidson was given free rein to go to town on the title and created many great new weapons like the Old Woman, Mad Cow and Sheep On A Rope. To quote another Amiga classic: "War has never been so much fun".

ATR - ALL TERRAIN RACING [1995]

Systems: Amiga 500, CD32

Jamie Woodhouse's other Team 17 game is probably the best racer to come from the developer. The graphics and sound were exemplary as always and the gameplay was very addictive. The likes of *Super Skidmarks* were better racing games but this was still worthy of a few laps nonetheless.

ALIEN BREED 3D [1995]

Systems: Amiga 1200, CD32

Id Software didn't believe it could be done but Andy Clitheroe somehow managed to get a highly playable and atmospheric *Doom* clone running on the humble A1200. Granted, the move to 3D resulted in *Alien Breed* losing a lot of the original's unique charm but it was still fantastic to play. This was the moment that the Amiga stood up to the bullying of the PC and proved its worth as a powerful home computer.

NIGHTLONG – UNION CITY CONSPIRACY [1999]

Systems: PC, Amiga CD

Although Team 17 had officially abandoned the Amiga in 1997 there were still several other developers and publishers producing Amiga games well into the new millennium. Canadian publisher ClickBOOM was one such entity and released many of the Amiga's last games of the Nineties including this Team 17 developed graphic adventure. Owing much to *Blade Runner*, *Nightlong* was a half-decent adventure that went down well with those who refused to let the Amiga die.

SUPER STARDUST [1994]

Systems: Amiga 1200, CD32

A pretty cool *Asteroids* clone from Bloodhouse software. *Super Stardust* is most notable for its stunning graphics that made full use of the AGA chipset. From the eye-melting range of colours to the metallic sheen on the spacecraft everything looked superb. The 3D bonus levels – think *Microcosm* but better – were an excellent showcase for the A1200's abilities.

ALIEN BREED TOWER ASSAULT [1994]

Systems: Amiga 1200, CD32, PC

Tower Assault was the final 2D *Alien Breed* and, next to *Worms*, is Team 17's most re-playable game. The A1200's abilities were used to the fullest to make a beautifully realised, fast-paced shooter. The new ability to walk backwards whilst firing complemented the action movie feel and the non-linear levels ensured that there was always something new to see. Avoid the PC version if possible, as there are loads of levels missing.

1994 | 1995 | 1996-9

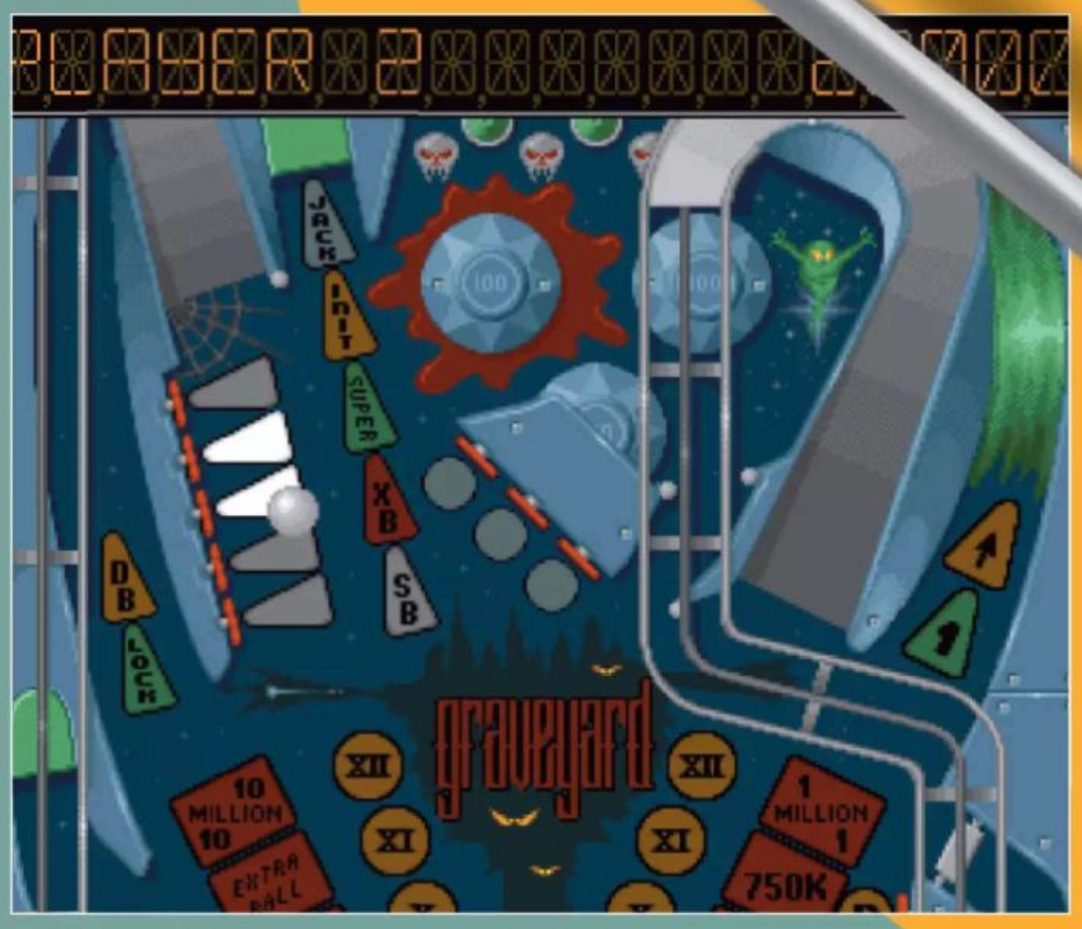
THE MAKING OF...

PINBALL DREAMS

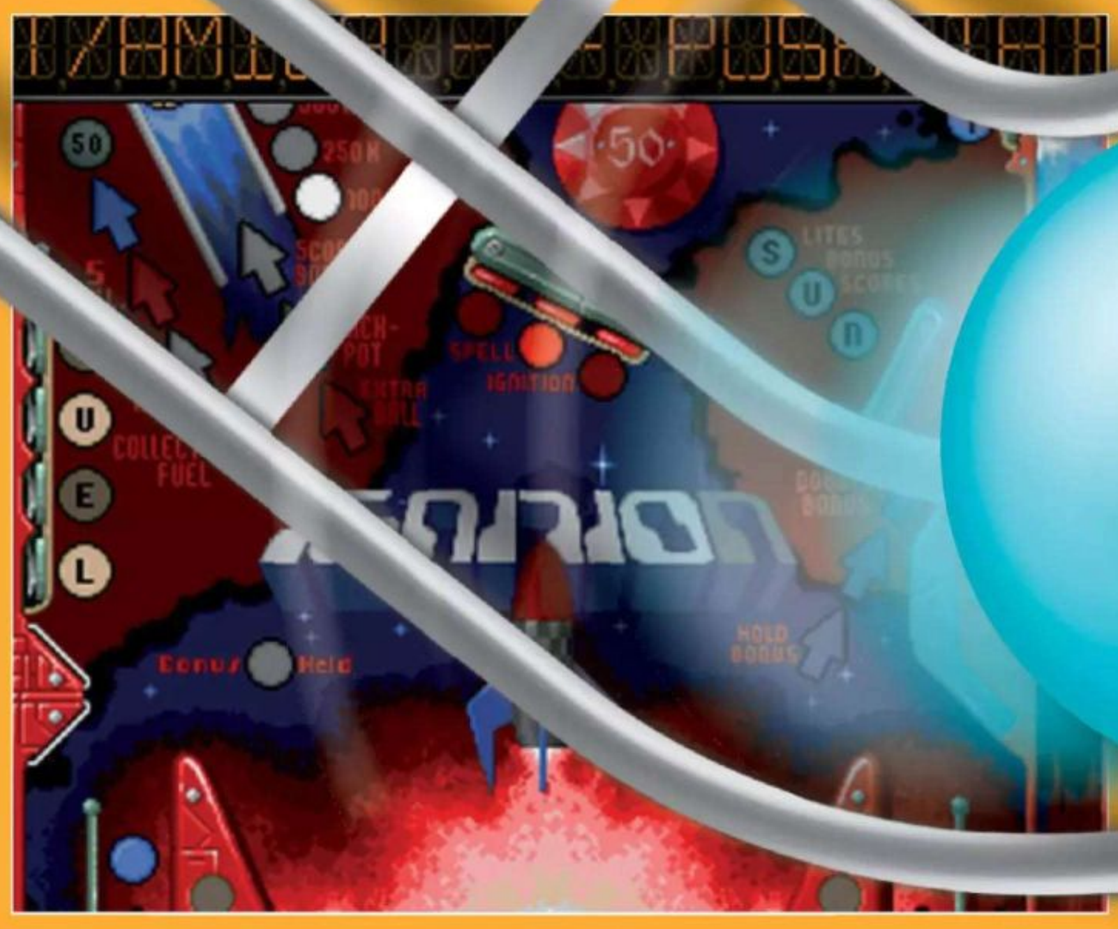
Back in the Amiga's heyday, there was a Pinball game that revolutionised the genre and is still heralded by its fanbase. That game is Pinball Dreams, soon followed by the technically superior Pinball Fantasies. Kim Wild chats to Andreas Axelsson about DICE's acclaimed Pinball trilogy and its subsequent success

In 1988, a group of Swedish teenagers were members of an Amiga demo scene and began experimenting with new technology. Their name was 'The Silents' and they went by the acronym TSL, (said to stand for 'Trans-Atlantic Speed League'). It was this group that pioneered the idea of developing games commercially. "The demo group who we were part of (The Silents, or TSL), spent part of the summer of 1989 in a summer house in the south of Sweden." explains Andreas about the game's origins. "One of our Danish members showed some pinball tables he'd been drawing. Olof, Fredrik and I had been thinking about moving away from demos to games, and this was the igniting spark. A pinball game also did seem like a pretty light-weight first game."

» The infamous PartyLand from *Pinball Fantasies*, inspired by countless amusement parks visited by the team.



» Each table in *Pinball Dreams* was unique, requiring different strategies to attain the best scores.



» "*Ignition*, with its simplicity is one of my most played tables" recalls Andreas Axelsson when quizzed about a favourite table.

The idea bore fruit and the five individuals, Andreas Axelsson (Goofy/TSL), Ulf Mandorff (SinCos/TSL), Markus Nyström (Chevron/TSL), Olof Gustafsson (Blaizer/TSL) and Fredrik Lilegren, started development on *Pinball Dreams*. After a while, they realised that a game alone would not be enough. "Digital Illusions was formed from the five guys making *Pinball Dreams* as it became apparent that we needed some kind of company name, both to put on the box, but also to manage the income and taxes. So the game was born first, the company was a practicality that came later."

Armed with a company name and a partly developed *Pinball Dreams*, the ambitious group headed over to ECTS, although things didn't go entirely to plan. "Our first visit to ECTS was a real disappointment," recalls Andreas. "Of the few companies that bothered to take a look, only Bitmap Brothers and 21st Century Entertainment showed any real interest, but nothing concrete ever came out of it. The next year we were better prepared and the game we took with us was more or less complete. Fredrik was 21 and I was 17 at the time of our first trip, so we had tried to be as careful as possible with any too-good-to-be-true offers that companies approached us with. One of my neighbours suggested a lawyer he knew, so we got some help with the contracts from there. In the end, only 21st Century ended up being really interested, so it wasn't like we could pick and choose, even if everything had gone smoothly."

Pinball Dreams had four tables: Steel Wheel, Beat Box, Nightmare, and Ignition. Steel Wheel was themed around trains and the Wild West, something that "may have come about as a result of [Andreas] living right next to the railroad and having played a lot with model trains while younger"; Beat Box was centred on the music industry; Nightmare was inspired by horror movies; Ignition was themed around a rocket-launch, space and exploration. The cartoon style, which soon became a trademark of the series, was based upon the pinball machines themselves. "As pinball tables contain such a symphony of details you have to use lots of colour, sharp contrast and other techniques that you'll find in cartoons," explains Andreas to us. "Markus was our third attempt at finding an artist, so if we had gone with one of our other choices the final style may have been different."

Andreas cites the *Terminator 2* table as being the biggest influence on the game, although they played as many tables as possible to keep *Pinball Dreams* varied. Re-creating a pinball machine onto a computer was a tough process but, luckily, they had a die-hard pinball fan on the team. "While we all enjoyed playing pinball now and then, Olof was the genuine pinball freak. He'd be on the high-score tables in the arcades

IN THE KNOW

- **PUBLISHER:** 21ST CENTURY ENTERTAINMENT
- **DEVELOPER:** DIGITAL ILLUSIONS CREATIVE
- **RELEASED:** 1992
- **GENRE:** PINABALL SIMULATION

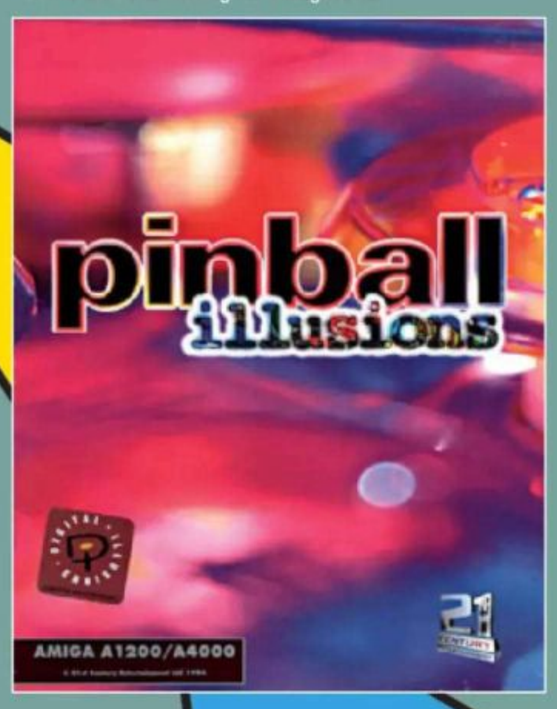
DEVELOPER HIGHLIGHTS

MOTORHEAD
SYSTEMS: PC, PLAYSTATION
YEAR: 1998

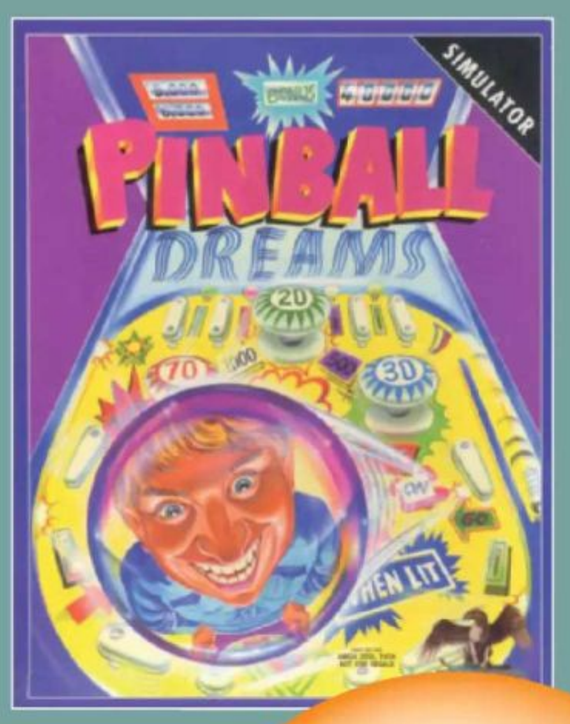
BATTLEFIELD 1942 (PICTURED)
SYSTEMS: PC
YEAR: 2002

RALLISPORT CHALLENGE
SYSTEMS: XBOX, PC
YEAR: 2002

» *Pinball Illusions* was the first Amiga game to skip the A500 format and was missing the Vikings table.



» The Atari Jaguar saw a conversion of *Pinball Fantasies*, which failed to capture the magic of the Amiga version.



» This box for Pinball Dreams was solely for the Amiga Zool compilation pack and was different to the retail release.

FLIPPING FUN

The success of *Pinball Dreams* and *Fantasies* meant conversions, and the games soon graced other systems including the Atari Falcon 030, Atari ST, PC, GBA, GP32, Amiga CD32, Atari Jaguar, Super Nintendo, Mega Drive, Game Boy, Game Gear and mobile phones. Notably, Digital Illusions weren't responsible for many of the ports. "We wrote the original Amiga version for all three games. All other versions were built by 21st Century or their subsidiaries, with us only providing technical advice. The only exception was when a group of Swedes from Uppsala contacted us after the dreadful version of *Pinball Dreams* on the PC came out. They ended up taking on the task of converting *Fantasies* and *Illusions* with splendour. I did give some support to Binary 9 for the GBA version, which turned out to be quite all right. I haven't seen the GP32 version, but I have spent some time assisting Rocket in Finland with their mobile phone version of the trilogy."

» Music and the charts were the main theme for this table.

» Many of the tables looked amazing with loads going on.

wherever he went and he also had friends who could get him access to real tables for sound-recordings. He ended up figuring out most of the scorings and events for the tables. Other than that it was just a genuine interest in getting it as good as possible that drove us onwards." Olof's dedication to the team's pinball game meant he spent several days sampling the sound of real pinball machines and then hours tweaking the various aspects in his tracker program. It's a factor that still amazes Andreas. "He'd occasionally have his Amiga 500 strapped to the back of his bike to always have it along if he got a new idea. With the memory restrictions we had I'm impressed with what he pulled together."

What really made *Pinball Dreams* stand out was its excellent physics engine and similarity to the real thing. "We knew from the start that if we couldn't get the ball right, there was no point in making the rest of the game, so we had this guy, Ulf Mandorff, who had studied technical engineering and who was a self-taught computer freak with many 'firsts' in the C64 demo scene, to think it all out." continues Andreas. "He spent most of his free time on the problem, as far as I could tell, for about six months and then called us up and said, 'It's going to be great'. After the basics were there, we spent the rest of development time tweaking material properties and minor bugs, but the core physics code changed very little after that initial development."

In 1993, *Pinball Fantasies* followed and was deemed to be the pinnacle of the series. Although there were still only four tables, each was three screens high, in comparison to *Dreams*' two; the animations were more advanced, had superior music and the tables featured three flippers. The tables are Partyland, Speed Devils, Billion Dollar Gameshow and Stones 'N' Bones which came from various sources. "Billion Dollar Gameshow was inspired by a game from *Bally*, but most of the others were just the result of late night brainstorming and trying to make them as varied as possible. In a way they reflect things we enjoy in real life. While doing *Pinball Fantasies* we spent several weeks in Los Angeles, visiting all the amusement parks, Disney Land, Six Flags and so on, which probably influenced Party Land. Speed Devils came from Markus' love of cars, and as Nightmare has been such a favourite we decided to make another (Stones 'N' Bones)."

The Amiga CD32 version followed, as did an improved AGA edition on four floppy disks. In 1995 the PC version *Pinball Fantasies Deluxe* on CDROM featured an additional four tables: Tarantula, Jail Break, Soccer and Jackpot. Although some prefer *Pinball Dreams*, both rocketed to the top of the charts selling in excess of 650,000 units between them at the time. The franchise still earns money via the re-make that's available on the GP32, the release of *Pinball Challenge Deluxe* on GBA (including the tables from *Dreams* and *Fantasies*) and various mobile phone conversions.

So what is it about *Pinball Dreams* and *Pinball Fantasies* that has seen the two games stand the test of time so well? Andreas feels that the key is attention to detail. "Apart from programming the game, I designed most of the table layouts, as I knew how best to utilize the various features in the engine. Olof then figured out how the scoring system would work, and together with Markus we tried to come up with as many varied themes as possible. Each table was also tweaked and redesigned numerous times over the three years it took to create *Dreams*. We played the game a lot and showed it to friends. Everything we didn't like or they didn't like, we tried to change. In the end I think it became very

"SO THE GAME WAS BORN FIRST; THE COMPANY WAS A PRACTICALITY THAT CAME LATER"
ANDREAS AXELSSON

» Many of the pinball tables were directly influenced by the passions and interests the team had in real life.

"ALL TABLES WERE ALSO TWEAKED AND REDESIGNED NUMEROUS TIMES OVER THE THREE YEARS IT TOOK TO CREATE DREAMS" ANDREAS AXELSSON

polished and that's a quality you see in most highly successful games."

The last game in the series, *Pinball Illusions* was released in 1995 on the PC and Amiga 1200 (the Amiga 500 would not see a version) although it failed to encapsulate the success of its predecessors.

» The gorgeous looking Partyland from *Pinball Fantasies* in all its three-screen high glory.

Starring three tables: Babewatch, Extreme Sports and Law 'N' Justice (the fourth, Vikings was omitted from the Amiga version) the game was visually impressive and possessed realistic ball physics plus a new multi-ball feature. As a pinball game it's decent enough, but the legacy of *Dreams* and *Fantasies* made it look inferior to its peers. "By the time *Illusions* appeared we'd been working on pinball games for many years and really wanted to try something else instead," admits Andreas. "Our focus was therefore not as good as it should have been; having moved from our home town to Gothenburg after *Fantasies* was completed didn't help either. *Pinball Illusions* lacks the love and passion we had when making the first two games." Digital Illusions went onto re-create the game for PlayStation and Saturn, completely re-writing it and re-naming it *True Pinball*, implementing the missing Vikings table.

Although there was a *Pinball Dreams 2*, this was developed by Spidersoft rather than Digital Illusions. "*Pinball Dreams 2* was made by 21st Century Entertainment and we had no involvement in that one, so I guess they didn't have what it took to get the feeling right."

Since its smash hit trilogy, Digital Illusions has gone on to create an assortment of games for different formats including PlayStation, PC and Xbox. Digital Illusions (now more often referred to as DICE) registered on the Swedish stock exchange in 1998 and has since experienced tremendous growth. It was the release of *Battlefield: 1942* and their respective sequels that saw an increase in popularity. Electronic Arts bought out shares to the company and now owns 62% as of March 2005. Andreas Axelsson has since left the company.

That's not the end of our tale however, as the release of Apple's iOS devices ushered in a new era for pinball games, which were ideally suited to the portable devices. As a result Cowboy Rodeo was able to update both *Pinball Dreams* and *Pinball Fantasies* for a whole new generation of gamers. They play brilliantly too, featuring all the superb gameplay that made them so much fun to play on the Amiga.

» The team's love of horror movies led to this creation while this table would later inspire Stones 'n' Bones in *Fantasies*.

THE FUTURE

The legacy of *Pinball Dreams* lives on in the re-creation of *Pinball Dreams* for the C64. Werner van Loo started development after a bet with CreamD on the #c-64 channel on IRC. "The argument was that a game like *Pinball Dreams* could never be converted faithfully to the C64. Naturally, a few things had to be omitted to fit the C64. I changed the score-display from a 'LED-bar' to a dot-matrix thing as you can't make nice diagonal lines in the upper border of the C64. My flippers have less animation frames; I think the Amiga version uses 14 frames, while I'm using seven. I left out two tables (Steel Wheels and Beat Box), due to time. Although the game is not complete, the demo can be downloaded from http://csdb.dk/release/?id=32484. You can also view it on YouTube by searching for *Pinball Dreams C64*.

TOP 25

AMIGA 500

With thousands of games released for the Amiga, any title making your top 25 would have to be very special indeed. David Crookes investigates

Datastock

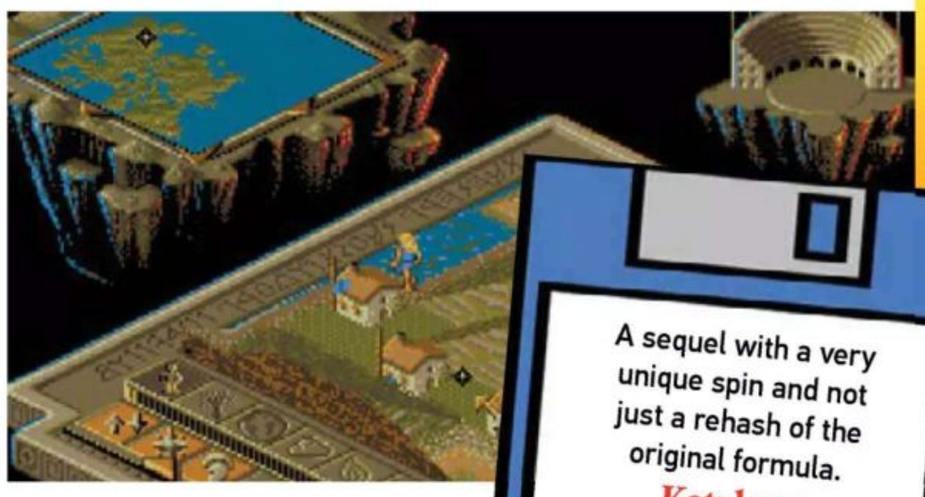
■ **DEVELOPER:** VISIONARY DESIGN TECHNOLOGIES
■ **YEAR:** 1989 ■ **GENRE:** SHOOT-'EM-UP

25 This *Defender* clone may have lacked true originality but it sure made up for it with sheer, fluid speed and flawless execution. Varied enemy armies spawned in their droves as you hurtled through the horizontally-scrolling landscape in search of eight pods, and unless you had lightning fast reactions to avoid and blast them away, early death in a thousand colourful pixels was inevitable. *Datastorm* pushed the Amiga's technology to the max.

Populous II: Trials Of The Olympian Gods

■ **DEVELOPER:** BULLFROG
■ **YEAR:** 1991 ■ **GENRE:** GOD SIM

24 Although some may say *Populous II* is a classic game but only by association of the original, its release in 1991 came during a golden, defining era for god-sims. This direct sequel was not a major departure from the debut of two years previous but, in keeping the core and the isometric view and expanding upon them with more options, what was in effect a grandiose game of chess offered much greater scope for re-playability. Attempting to become a powerful deity via the power of point-and-click has seldom been more fun.



A sequel with a very unique spin and not just a rehash of the original formula.
Katzkatz

It Came From The Desert

■ **DEVELOPER:** CINEMAWARE
■ **YEAR:** 1989 ■ **GENRE:** ACTION-ADVENTURE

23 Undoubtedly inspired by the big bug B-movies of Fifties America, *It Came From The Desert* was Cinemaware at its best, delivering finely-tuned slices of strategy, graphic adventure and arcade action. The game was as close to an interactive movie as 1989 was capable of delivering with each of the 20 locations perfectly capable of drawing in the player and keeping them going for long sessions at a time.

Hired Guns

DEVELOPER: DMA DESIGN
YEAR: 1993 **GENRE:** RPG

22 Spanning five disks, *Hired Guns* was a huge game showcasing equally sizeable ambition. DMA Design had carved out a solid reputation for scrolling shooters (and *Lemmings*, of course) but in *Hired Guns*, it was able to deftly combine a shoot-'em-up and an RPG, satiating the needs of two sets of players. Death lurked around every corner and the 19 3D levels heaved with free-moving enemies. Even though it bore similarities with *Dungeon Master* and *Captive*, it proved to be groundbreaking. The screen was split into four, each allowing different character perspectives and separate movement which was unheard of at the time and the game was also blessed with the killer combo of amazing graphics and incredible sound, the developer very much finding its feet in the third dimension. Little wonder that critics and gamers poured such lavish praise on it, with more than one reviewer at the time calling it an instant classic.

> Although I enjoyed *Captive* and *Eye Of The Beholder*, I felt *Hired Guns* beat them all in terms of atmosphere
>
> **U-1**

Wings Of Fury

DEVELOPER: UNLIMITED SOFTWARE
YEAR: 1990 **GENRE:** ACTION

21 *Wings Of Fury* was originally a well-received 8-bit action-sim that had turned many a head on the Apple II. Three years later, it was being ported to various machines including the Amiga, but it cut gamer opinion in half (*Amiga Action* went as low as 39 per cent; *Amiga Power* up to 88). It is easy to see why. *Fury* had a difficult learning curve thanks to the realistic 'sim-like' way it approached the controls which made landing the plane quite baffling at first. The speedy advances of gaming also meant the cute, cartoon graphics of *Fury* looked instantly dated – more so now – especially given *Shadow Of The Beast* was demoing Amiga graphics at the time. But *Fury*'s gameplay, while repetitive, stood up well. The World War II flight missions pitted players against the advancing Japanese and there was much weaponry to drawn upon. It suited players with fast reactions because it could get rather hectic.

Dungeon Master

DEVELOPER: FTL GAMES
YEAR: 1987 **GENRE:** RPG

19 Initially released as a 1,024K-only game, the long-awaited Amiga port of this Atari ST classic flew off the shelves. *Dungeon Master* was a real-time, mouse-controlled RPG with 14 imaginative levels and some very spooky warning sounds when an enemy came close to you.

The Settlers

DEVELOPER: BLUE-BYTE SOFTWARE
YEAR: 1993 **GENRE:** REAL-TIME STRATEGY

18 It isn't always easy to inject personality into tiny gaming characters but *The Settlers* cracked it. In asking players to build and run a thriving city, it took a blend of *Populous* and *Sim City* and made strategy games beautifully accessible. Lovely jaunty music too.

Stunt Car Racer

DEVELOPER: MICROSTYLE
YEAR: 1989 **GENRE:** RACING GAME

17 Viewed from the cockpit of a supercar with its roaring metallic engine and thick tyres in full view, *Stunt Car Racer* provided challenging, gap-strewn elevated tracks full of twists and turns that would have you gripping the joystick in fear. Geoff Crammond pulled a blinder and got his name on the box.

Rainbow Islands

DEVELOPER: TAITO
YEAR: 1990 **GENRE:** PLATFORM

16 As cute coin-op conversions went, *Rainbow Islands* on the Amiga was as faithful as they come. The game perfectly replicated the classic platformer, ensuring baddies were splatted by colourful rainbows and it became the first ever number one in *Amiga Power*'s All Time Top 100 list.

Hunter

DEVELOPER: TAITO
YEAR: 1995 **GENRE:** SHOOT-'EM-UP

15 Activision's crudely-drawn yet slick 3D epic allowed gamers to wander around a digital world, shooting people and choosing from more than 15 vehicles to drive and smash to pieces. If that sounds a tad like *Grand Theft Auto*, then it's little wonder – with hindsight, the two have been compared.

Lotus Esprit Turbo Challenge

DEVELOPER: MAGNETIC FIELDS
YEAR: 1990 GENRE: RACING

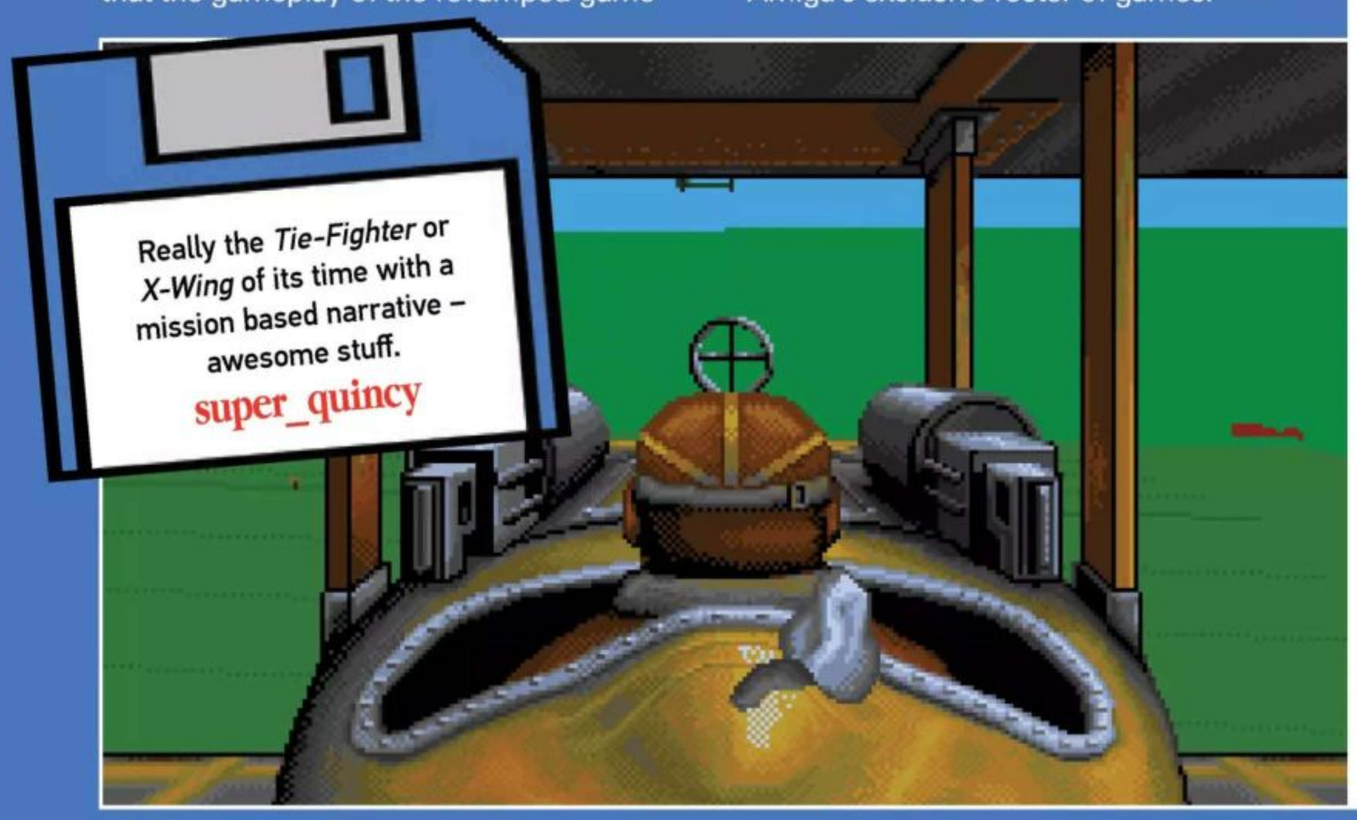
20 Of all of the *Lotus Esprit Turbo Challenge* versions, the Amiga's stood out the most, not least because it had more race tracks than on the other platforms – with 32 in total – as well as the best graphics by some distance. It also had intricate details such as brake lights, incredible speed and a choice of audio which, coupled with precision controls, 19 rival racers and the need to finish in the top half to progress, made for some exhilarating races. In the process, the game became a benchmark for racing games on the Amiga. It was not just the level of ideas that were included such as pit stops, two different types of joystick control and the ability to use a mouse. For many, the key was the split-screen action that allowed for blistering two-person play without any noticeable on-screen slowdown. It was disappointing that single-player games would not take up the entire screen but this genre was, at the same time, new ground for Gremlin and it learned quickly (this issue was rectified in the sequel). Buoyed by the game's success, Gremlin went on to release many other driving games, *Super Cars* and Nigel Mansell's *World Championship Racing* being most notable.

> "It was good that the Amiga wasn't really a 3D machine. It forced you down one route, but you got excellent results"
>
> **Shaun Southern, coder on Lotus Esprit Turbo Challenge and Super Cars II**

Wings

DEVELOPER: CINEMAWARE **YEAR:** 1990
GENRE: FLIGHT SIM, INTERACTIVE MOVIE

14 With a Kickstarter project having been successfully funded, Cinemaware is close to releasing a remastered version of this interactive movie/flight sim. Given the original game suffered from mass piracy back in 1990, the company deserves the extra cash injection from this latter-day classic but it is also great to see that the gameplay of the revamped game will be very similar to the original. Once again, players will be put in the cockpit of an SE5 biplane during the First World War and allowed to assume an alter ego. *Wings* required the completion of more than 230 missions over a two-year time period. It involved exciting dogfights as well as the absorption of lots of historical bits and bobs which lent much context to the proceedings. Some of the info could get a little tiresome but the overall package was well designed and proved a top-notch addition to the Amiga's exclusive roster of games.



Then who keeps up the law and maintains order?
Then who eats the donuts and roughs-up the transients?
Please! Not in my new coat!
OK, put me down now and I won't have to hurt you.

Monkey Island 2: LeChuck's Revenge

DEVELOPER: LUCASARTS **YEAR:** 1991 **GENRE:** GRAPHIC ADVENTURE

13 After the debut of LucasArts' hilarious point-and-click classic had gone down so well with players, a sequel was inevitable and director Ron Gilbert ensured no one who bought *Monkey Island 2* was disappointed. Just opening the box and spotting an abundance of disks was enough to overawe most gamers but *MI2* was all about delivering more. There was more hair on Guybrush's face, more detail in the graphics, more humour and more silliness (check out the ending which prompted a flood of complaints). And as Guybrush set out to find the mysterious treasure of the Big Whoop, players could, for the first time in a point-and-click game, choose one of two difficulty modes. The sequel benefited from the debut use of LucasArts' new iMuse audio system.

The Chaos Engine

DEVELOPER: THE BITMAP BROTHERS
YEAR: 1993 **GENRE:** RUN-AND-GUN

12 The Bitmap Brothers had been marking its mark on the Amiga (and Atari ST) scene since 1987 and, having taken inspiration from a novel by William Gibson and Bruce Sterling called *The Difference Engine*, *The Chaos Engine* was a fine example of its later work. Players took their place in a group of six mercenaries keen to sort out the mess caused by a time traveller who, having found himself stranded in a late-17th Century steampunk England, had introduced new technology ahead of time and rewritten history. The result was an original top-down, run-and-gun game spread over four distinct worlds that was packed with puzzle elements including plenty of gold keys to open secret rooms, dynamite to destroy beetles and appearing bridges. As with most Bitmap games, the graphics were clean and well styled and the gameplay was accessible and addictive.

Super Cars II

DEVELOPER: MAGNETIC FIELDS
YEAR: 1991 **GENRE:** RACING

11 Although Magnetic Fields had proven itself more than capable of 3D-style racing games with *Lotus Esprit Turbo Challenge* (and had taken pole position as one of the world's best racing game developers for a spell), its release of the top-down racer *Super Cars* in the same year was attracting as much attention. *Super Cars II* was, therefore, inevitable and in sticking to a bird's eye view that had been a staple of many a racer throughout the previous decade, it not only retained fans of the first game but added so many more. Its lush graphics, blistering audio, weaponry, speed, exhaustive cornering and an emphasis on fun made it an essential Amiga purchase even for those who had bought the original. Much of this was due to its split-screen view for two-player head-to-heads and the three difficulty levels with seven tracks. The bizarre but brilliant cutscenes in which the player would be quizzed by various bodies, be it the police, a journalist or some other official person, also provided standout moments. Correct answers would boost the coffers needed for upgrades or get you extra championship points.

Specification
Engine: 5498cc, 8 cylinders, 16 valves
Max. speed: 243mph
Max. power: 520bhp
Acceleration: 0-60 in 3.8secs.
Special Features: Front/Rear missiles, 'Super' missile, Homing vehicle, Mines, Battering ram, Nitro boost, Armour-plated bodyshell

I never mastered this game fully but one of my friends did. Total control was everything but I still had great fun playing mates.
Nemesis

Kick Off 2

DEVELOPER: DINO DINI
YEAR: 1990 **GENRE:** SPORTS

10 The original *Kick Off* divided audiences upon its release in 1989, so it's not too surprising to see that it is the superior sequel that has made our readers' list. While that does put it behind *Sensible Soccer*, its main footballing rival at the turn of the Nineties, if *Kick Off* or its rather brilliant sequel had been left out of the top 25 altogether, it would have been extremely surprising.

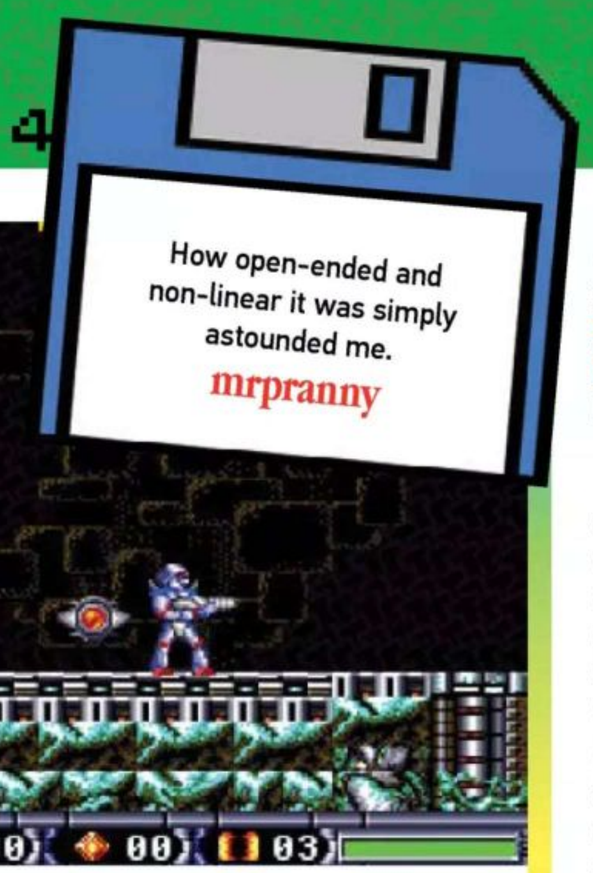
With a bit of time spent learning the controls and understanding that the ball didn't stick to the players' feet (something that was, actually, very obvious from the off), patience paid off. If a friend had invested the same level of time in the game, then going head-to-head with a pal made for a rewarding experience, even if that experience was not altogether different from the first game. As a neat extra, use of an adapter would allow three or four players to get involved, with two gamers teaming up to play one team. This didn't work quite as well as perhaps Dino Dini would have liked but the effort was appreciated. It was tense as well, with the sudden death penalty shoot outs proving particularly nail-biting.

It appeared at times that Dino was packing the game with everything he would have liked from a football game. Players had great control and they could set time limits, skill levels, tactics and pitch types. They could even design the kit. There were eight international teams that could play in a league or a cup. While *Kick Off 2* wasn't going for extreme realism – there was no offside rule for a start – it felt like a high tempo English match. It emphasised keeping possession. This was achieved not by dribbling around a huge number of players but through passing and ensuring the ball edged up the field into scoring positions. As a result it proved extremely popular, with many considering it Dino Dini's finest hour. In aiming to replicate football's thrill and excitement, scoring in *Kick Off 2* felt like a genuine triumph and there is no doubt it was a winner.

MicroProse Formula One Grand Prix

DEVELOPER: MICROPROSE
YEAR: 1992 **GENRE:** RACING GAME

9 With Gremlin/Magnetic Fields going for all-out arcade action, MicroProse took a realistic approach to racing. Geoff Crammond spent months researching the look and feel of 16 real racetracks and the mechanics of F1 cars. The result was an accurate rendition of the sport that ran at an awesome speed. Unlike *Lotus Esprit Turbo Challenge*, the cars would sustain damage that would affect a race and mods would enhance or detract from the experience. The sheer level of detail, the need to put yourself through qualifying laps and the inclusion of proper tournaments set lofty new standards for racers.



Turrican II: The Final Fight

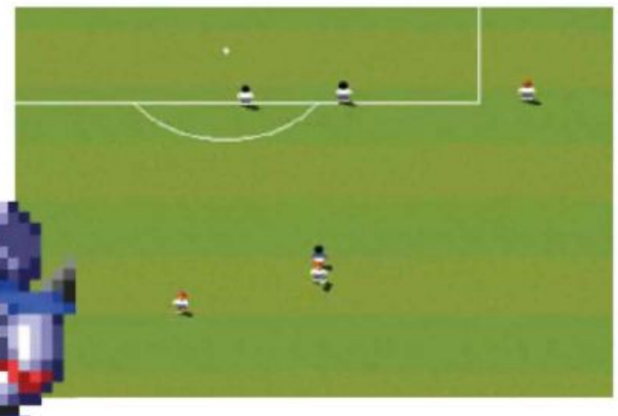
DEVELOPER: FACTOR 5
YEAR: 1991 **GENRE:** SHOOT-'EM-UP

8 Vast is a word often used to describe large games but *Turrican II* actually deserved such a description. Taking inspiration from a host of shoot-'em-ups and mixing them into one big pot, *Turrican II* had 1,500 screens broken down into 12 multi-directionally scrolling levels, each of which were full of hidden platforms, power-ups and traps. To keep gamers motivated (the game posed one tough challenge), the five worlds looked distinct from each other. It helped that gamers were able to approach the game in a gung-ho fashion or take a less mind-blowing approach by ducking away from the most fiendish of enemies. As long as the exit was found within a set time limit, the choice was that of the player. It was also, it must be said, a mapper's dream.

Sensible Soccer

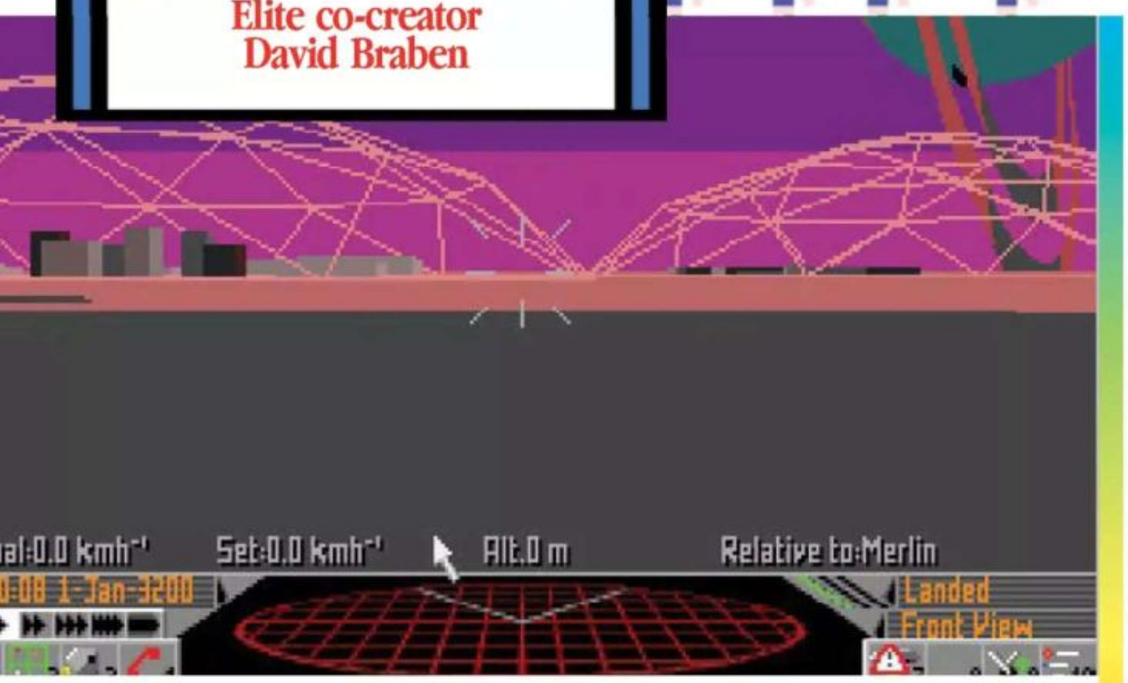
DEVELOPER: SENSIBLE SOFTWARE
YEAR: 1992 **GENRE:** SPORTS

7 At the turn of the Nineties, the trend for football games had switched to a top-down approach thanks to the success of *Microprose Soccer* and *Kick Off*. It did not matter that they were not realistic renditions of the game, only that they played well. Duly noting this, Sensible Software, which had created *Microprose Soccer* and had spent much time with *Kick Off*, took the sprites from *Mega-Lo-Mania*, let them boot a ball around a pitch and created *Sensible Soccer*. With a one-button control scheme, a ball that wouldn't stick like glue to players, a top-down perspective that allowed a great view of the pitch, nine tournaments, 98 league and national sides and a cool aftertouch feature that controlled height and power, *Sensi* was a pure game of skill. In the first six weeks on sale it sold 43,000 copies…



"*Frontier* was special to me as it allowed me to greatly broaden what *Elite* was about, adding the rich galaxy and the Cold War backstory"

Elite co-creator David Braben



Frontier: Elite II

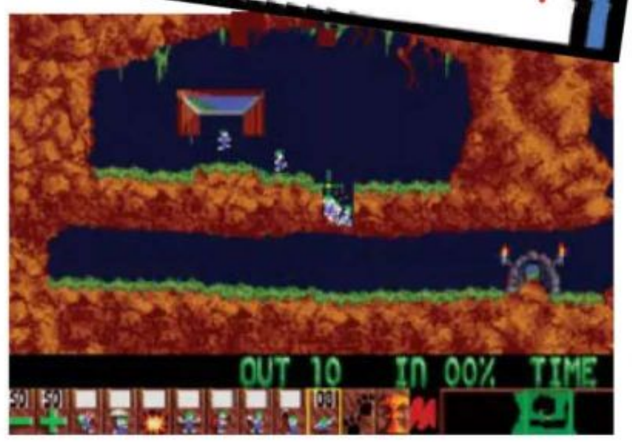
DEVELOPER: FRONTIER DEVELOPMENTS

YEAR: 1993 **GENRE:** SPACE TRADING

6 *Elite* was an 8-bit space-trading classic that regularly tops best game polls, but the 16-bit sequel that arrived nine years later won over fans of the Amiga. It had a huge gaming environment that no gamer could ever cover given that each of the 1 billion systems was up to 1.95 light years in diameter. This open-ended gameplay was the star attraction, though, picking up where the debut game left off, albeit on a much more powerful system. While it did contain bugs and suffered from poor frame rates on the A500, the game's colourful polygon graphics and engaging space battles brought great depth of play. Gamers could be who they wanted to be and do whatever they fancied doing in a game that had the potential to engross for months on end.

"Having come through the 8-bit era, all of a sudden we had machines that were almost super-computers by comparison – the Amiga was king of them all"

Lemmings artist Mike Dailly



Lemmings

DEVELOPER: DMA DESIGN

YEAR: 1991 **GENRE:** PUZZLE

5 While the Amiga was blessed with many puzzle games, few came close to matching the mix of brainpower and reflexes needed to guide everyone's favourite tiny humanoid creatures to safety. The tight nature of *Lemmings*' design ensured gamers could use ingenuity and cunning to chart their own path through the levels. At the same time, players needed to make decisions regarding the number of lemmings they could sacrifice for the greater good – not always easy when the critters were as cute and personable as these. Amazing sound effects, which included the infamous 'oh no!' as the lemmings exploded in a shower of pixels, cemented the game's popularity. Around 55,000 copies were sold on the first day.

Sensible World Of Soccer

DEVELOPER: SENSIBLE SOFTWARE

YEAR: 1994 **GENRE:** SPORTS

4 Sensible Software's co-founder Jon Hare has frequently bemoaned the glossy, TV-style presentation of modern football videogames. So in carrying the top-down view and tiny players of *Sensible Soccer* into the adored sequel *SWOS*, the developer showed itself to be unswayed by the emergence of the *FIFA* series of games. Instead, it took all that glittered with *Sensi* and turned it into gold, adding more teams and players, sprucing up the graphics and introducing a career mode that allowed players to manage a club of their choice.

Cannon Fodder

DEVELOPER: SENSIBLE SOFTWARE

YEAR: 1993 **GENRE:** ACTION

3 There is no doubting that *Cannon Fodder* was a violent, complex game that was big on presentation even though its main characters were rather small. But at the same time, *Cannon Fodder* showed a level of maturity and daring that many other games would not have dared try. With soldiers screaming in agony and a jaunty title song that told the world 'War! Never been so much fun' was evidence of a game developed with tongues firmly stuck inside cheeks. So when the Royal British Legion called the game "sick and desperate" before its release and stopped Sensible Software from using the poppy on the cover, it was entirely wrong. *Cannon Fodder* showed the futility of war and this was evident throughout its 23 magnificent missions.

The Secret Of Monkey Island

DEVELOPER: LUCASFILM GAMES

YEAR: 1990 **GENRE:** ACTION

2 There is no denying the impact *The Secret Of Monkey Island* had, not only on point-and-click adventure games but on gaming as a whole. It was the first point-and-clicker to have a full soundtrack and even the first to be turned into a live stage play (thanks to a performance in 2005) but it continued the tradition of *Maniac Mansion*, thanks to the success of the SCUMM scripting language that underpinned it. Players cared less for the mechanics, though, and instead lapped up the humorous dialogue, the graphics and the narrative. The sword duels were a battle of sharp wit rather than pointed metal and there were beautiful references to Lucasfilm adventures that preceded it. It all helped the game to win over a new, more mainstream audience and it is rather telling that only Lucasfilm Games adventures make the Amiga top 25. There is no room for Sierra's *Space Quest* nor *King's Quest*, it seems.

Speedball 2: Brutal Deluxe

DEVELOPER: BITMAP BROTHERS **YEAR:** 1990 **GENRE:** FUTURISTIC SPORTS

retro GAMER READERS' CHOICE

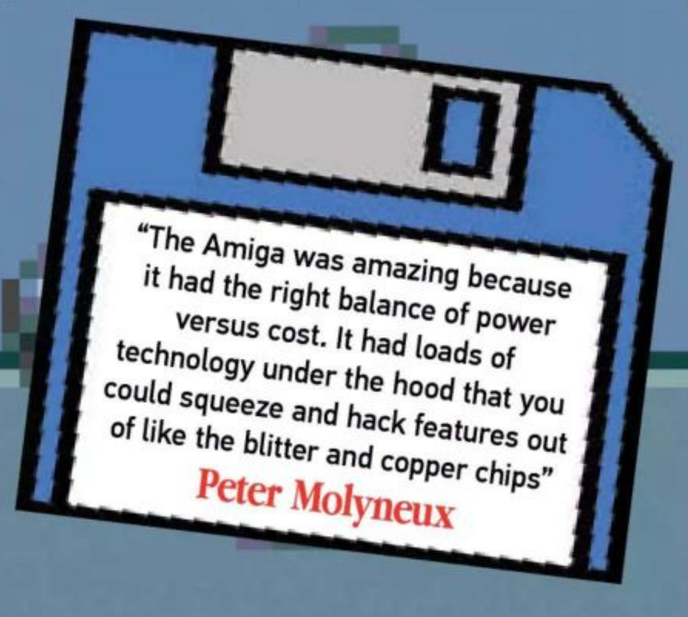
1 The Bitmap Brothers had a reputation for producing some of the Amiga's finest games and readers have pushed it into top position by deeming *Speedball 2: Brutal Deluxe* as the best title to have ever graced Commodore's 16-bit computer. As the name suggests, *Speedball 2* built upon the success of the *Speedball* (which was the London-based developer's second game) and it once again enthralled players with a fast-paced futuristic sports beat-'em-up.

While most sports games of this kind would concentrate purely on scoring goals, *Speedball 2* instead asked players to amass the most points, which was a departure from the first game. Goal scoring achieved some of those points but so too did bashing any of the opposing nine players or collecting any randomly appearing icons. This made for a violent and frantic game, with players having just 90 seconds in each half to make their mark. It was hard to keep the ball for too long so it was usually a case of catch and throw, the ball able to be flung in eight directions in the hope of landing with a teammate.

To make life a little harder, The Bitmap Brothers doubled the size of the playing area from the debut game. It also made it difficult for one team to truly run away with a game by introducing a score multiplier that would help a team falling behind to rapidly catch up and increase the tension yet again. Two-player games would benefit from two-legged matches. By collecting plenty of coins in the first leg, a team would gain an advantage in the second. Players would, therefore, give much thought to the best tactics to employ as the game went on. Smashing an opponent to pieces either through goals or brute force was not always the best way forward. Strategy ruled.

Speedball 2 really did have everything. The faster scrolling and management option (ensuring the team Brutal Deluxe was always on top form) were more than matched by enhanced sound which created a buzzing atmosphere and a sense of occasion. While the crowd was getting rowdy and taking up the offer of ice cream, the players would wince in pain and the commentator would lend an American sporting edge.

That was apt given the game was, in a sense, like a hyped up, harsher version of American Football, a sweat-'em-up as one pundit put it that had joysticks dripping and mouths drooling at the professional presentation and gorgeous graphics. You know a developer is on to something when you play a game that it supposedly set some years ahead of your current day yet it makes you yearn to travel in time to that point in the hope the sport has transcended into real life. Health and safety rules will most likely ensure that never happens but replaying this – or Tower Studios' smartphone/tablet version from 2011 – will always provide a current-day adrenaline rush.


"The Amiga was amazing because it had the right balance of power versus cost. It had loads of technology under the hood that you could squeeze and hack features out of like the blitter and copper chips"
Peter Molyneux

5 reasons why it's great

- The game's mechanics – bouncing the ball off walls, nine players per team – produced depth.
- The music was incredible thanks to the genius of Nation 12 that boasted former Ultravox singer John Foxx.
- Rules, what rules? In a game that is about scoring any way you can, there is no chance of the action letting up.
- It was violent. Sure, athletes bang on about fair play but there's a reason ice hockey is so popular.
- The game's smooth scrolling ensured players concentrated purely on the action.

JETS

The game that dropped a bombshell on the CD32's launch lineup, Jetstrike was an arcade flight sim oozing with detail and wacky humour. Mike Bevan speaks to creators Aaron and Adam Fothergill

IN THE KNOW

» **PUBLISHER:** RASPUTIN SOFTWARE

» **DEVELOPER:** SHADOW SOFTWARE

» **RELEASED:** 1994

» **PLATFORM:** AMIGA, AMIGA CD32, PC-DOS

» **GENRE:** FLIGHT-SIM/SHOOT-'EM-UP

The idea behind *Jetstrike* is a simple one: pick any plane from the dozens available in your hanger, load it up with weapons, and fly out across a scrolling landscape, dealing out as much damage to the enemy SPUDD (Society of Particularly Undesirable Dastardly Dudes) installations as possible. And if you end up going down in a huge fireball and bailing out, pick another aircraft and do it all again. A mixture of *Defender*, *Harrier Attack* and every *Top Gun* cliché you ever heard (in a good way, mind) it's silly, hard as nails and absolute buckets of fun. For the creators, Aaron and Adam Fothergill, it was the culmination of projects that started on the Apple II, which moved to the Atari ST with a game called *Skystrike*, and it ended with the CD32 title that *Amiga Power* would name as the 28th best game of all time.

"My Dad was in the RAF, and me and my brother toyed with wanting to be pilots," recalls Aaron, *Jetstrike*'s coder and mission designer. "At the time I wanted to become a recording studio engineer but I was good at computer [programming], so eventually I decided to focus on computers. And then my dad got posted to Hong Kong and we got an Apple II clone. That's when I wrote *The Ace*, which was a World War I fighter pilot game that later turned into the games *Skystrike* and *Jetstrike*."

Away from the UK for several years, Aaron admits that he never got to see games like *Harrier Attack*, with one of the inspirations behind his foray into computerised aviation being an early American Apple title. "I had played a competitive multiplayer game called *Dogfight*," he tells us. "It had these simple rotational controls and when you got shot down you bailed out. If you survived, you respawned but if someone shot your parachute, you died. It was a really fun game."

"I also got into *Joust*, and *The Ace* was the first variant of what we did with *Jetstrike* where we did it side-on, and it was all about the dog-fighting tactic of getting above someone to shoot them. Also all the things you see in aviation movies where people crash-land or bail out just before their plane explodes. I did a WWI version with biplanes and a jet-based one, with a single aircraft in each game. It was very simplistic, just flick-screen stuff, but it was just a really good learning project."

"When we got back to the UK, Adam got an Atari ST and I hijacked it and started messing around with GFA BASIC. I wrote a version of *The Ace* where Adam started doing 'proper' graphics because everything up until then had really just been coder art." These experiments led to *Skystrike*, a World War II flying game written as an

TRIKE

HOW TO WIN THE WAR

Eight of the most useful planes in the game. Plus a hang glider and a dragon

HURRICANE

■ One of Aaron's favourite aircraft, the venerable Hurricane shot down more enemy planes than the Spitfire in the Battle of Britain. In *Jetstrike* it also seems to be able to take a few more hits than the Spit due to its wooden airframe.

HARRIER

■ This British marvel was made famous by for its role in the Falklands War as well as a star turn in the Arnie movie *True Lies*. Its VTOL capabilities give it the ability to hover like a helicopter while retaining the speed and agility of a jet.

GRUMMAN GOOSE

■ The Grumman Goose was used as an amphibious transport plane in World War II, and also by the United States Coast Guard. It's a sturdy platform for recce missions with the added bonus of being able to ditch safely on water.

F-15 STRIKE EAGLE

■ This multi-role fighter-bomber is able to carry a huge loadout of bombs and other assorted weaponry should you desire. Armed with a cannon and decent payload of Sidewinder missiles it also makes excellent in dogfights.

A-10 WARTHOG

■ Along with the Russian Frogfoot this is probably the best ground attack aircraft in the game, although its tank-busting chain-gun is a little weak against the enemy aircraft. Its thick armour also means that it can take a lot of punishment.

MIG-29 FULCRUM

■ An extremely agile Soviet fighter jet which is more than a match for the American F-15 and F-16, the Fulcrum has the added advantage of a computer-aided gun targeting system, giving it an accurate edge in dogfights.

SU-27 FLANKER

■ Like the MiG-29 the Flanker was designed to take on the advanced American fighter aircraft of its time, being heavily armed and armoured, not to mention it was supremely manoeuvrable. It also has a similar computer-guided gun.

KA-50 WEREWOLF

■ A Russian attack helicopter with a distinctive twin coaxial rotor system, the Werewolf is possibly even more fearsome than the American Apache. It's also the only chopper in the game to be fitted with an ejector seat, which is good news for the pilot.

HANG GLIDER

■ It may just be a sheet of tarpaulin with a few metal struts holding it together, but this handy vehicle is almost invisible to radar meaning that it can slip into SPUDD territory on certain undercover missions without being detected.

DRAGON

■ This fire-breathing beastie was created for a fantasy-themed magazine cover-disk before making it into the main game. It can be used for those tricky missions where barbecuing the enemy out of pure wrath is particularly desirable.

» The amount of sprites Adam created for just the Harrier demonstrates the amount of work that went into animating the full roster of planes.

entrant in a programming contest for users of STOS, an AMOS-like programming language for the ST.

"We were absolute plane nuts at the time, I've always been into Spitfires and stuff like that and Aaron was still probably into his Biggles books," chuckles Adam, who produced *Jetstrike*'s graphics and music. "When we came back from Hong Kong we were stationed at Chivenor, an RAF base in North Devon. They had an air show every year and Aaron was recording bits and pieces of audio from the air show to put in the games."

"*Skystrike* really nailed the gameplay down instead of being an experimental messing around game," says Aaron. "The whole thing was based around flying a Spitfire. It was still flick-screen, but there were over 150 different missions. All the stuff I'd worked out in *The Ace* went into that, silly things like flying under bridges and through tunnels or shooting down a duck for the CO's dinner, as well as progress missions of trying to take over enemy airfields"

One feature of *Skystrike* that became an important element of ▶

» [Amiga 500] Despite its pathetic machine gun the Fokker Triplane is loads of fun to fly.

» [Amiga CD32] Deep over the SPUDD-infested jungle things are looking bad for our plucky Tornado pilot.

▶ *Jetstrike* was how the entire game took place in a primitive open world. "Another influence was the original F-15 Strike Eagle, along with F-16 Fighting Falcon on the ST," states Aaron. "Both of those had the idea that you could play tactically, so you could do a main mission but you had the option of taking out secondary targets such as AA guns that made subsequent missions easier. In *Skystrike* you could fly anywhere you wanted and blow things up and they stayed blown up… The principle was the same in *Jetstrike* except it was level-based, so for a number of missions you'd be in the same area, and while you were there the world was persistent."

"*Time Pilot* was another game that I liked but I hated the controls," adds Aaron, "which is why *Jetstrike* has this weird rotational control but done in a different way. That worked out better for some of the stunts you had to do in the game." Nowadays the up-down rotational control system for the planes might come across as a little unwieldy, but at the time it was par for the course. "*Jetstrike* was absolutely, unashamedly hardcore," admits Aaron. "The first few levels were 'learner' levels followed by a few 'cruising' levels where you were just gaining skills, then a 'bastard' level that you couldn't get past it unless you'd really developed your skills. It's an interesting progression curve, and compared to a modern game it's really hard…"

One of the big draws of *Jetstrike* is the sheer number of planes you can fly, particularly in the Amiga 1200 and CD32 versions. Then there's the array of different weapons to try, all based on real-world armaments, from Sparrow and AMRAAM missiles to rocket pods, cluster bombs and laser-guide ordinates. "All the aircraft we'd ever seen and thought should be in a game were in [the game]along with all the weapons," says Aaron. "Looking back now as someone who classifies themselves as a pacifist, I'm almost embarrassed about it! There were oddities like the Gee Bee racer and Fokker Triplane, and we picked some aircraft from watching films like the Pilatus Porter from *Air America* and the A-6 Intruder from *Flight Of The Intruder.* The Harrier was my best achievement in the game once I got the full VTOL controls in it. Technically the most powerful aircraft were the Mig-29, the F-15 (huge weapon load outs) and the A-10 and Frogfoot, which were basically flying tanks. We even put in a actual dragon!"

"The Harrier was my best achievement in the game once I got the VTOL controls in it"

Aaron Fothergill

» [Amiga CD-32] One of the early missions is to destroy this submarine.

The job of creating all the sprites for each plane was Adam's responsibility. "It was all done by hand and I came up with a bit of a technique to draw in perspective," he says. "For any aircraft you could pretty much draw in the wing perspective and put in the detail afterwards. I've never been a strong animator but my aircraft recognition was good. Little things like making sure that the nose-cone on a Jaguar looked correct, because a Jag has a very distinctive nose-cone compared to a Tornado for instance, although when you have about three pixels to do that it in was quite tricky…"

In the game, picking the right aircraft for the right job was crucial, for instance early missions like taking reconnaissance photographs or dropping off spies could be done in light planes like the Porter, while dangerous ground-attack missions were a job for the heavier payloads of the A-10 or F-15. "Part of the tactical approach of *Jetstrike* was only allowing each aircraft to be flown a certain number of times, apart from the really weak training aircraft," says Aaron. "You could pick the best aircraft straight away, but you'd only have a certain number of uses so by a few missions in you wouldn't be able to fly them anymore. So it became important to try and save the better planes for the harder missions later in the game. The last mission is a *Star Wars*-esque 'fly down a narrow tunnel and shoot at a tiny target' one in a mountain base. And I remember testing that mission with the Fokker Triplane, because I was imagining a scenario where that was the only aircraft the player had left…"

An example of the attention to detail in the game was a little Easter Egg that only one in every million players of *Jetstrike* is likely to have ever seen, the hidden *Macross*-inspired Alien Superfighter. "I remember someone wrote into one of the Amiga magazines and said, 'I was flying really high up in *Jetstrike* and this UFO came down and crashed into me then apologised and gave me this new plane to play with,' and of course the tips guys was like, 'Yeah right, no chance,'" laughs Aaron. "And then we wrote to them and said it could actually happen – you have to be flying at a certain altitude, dead

DEVELOPER HIGHLIGHTS

BASE JUMPERS
(PICTURED)
SYSTEM: AMIGA
YEAR: 1995

TOTEMBALL
SYSTEM: XBOX 360
YEAR: 2006

ANY LANDING
SYSTEM: iOS
YEAR: 2014

» [Amiga CD32] Landing your plane was always one of the trickier feats to pull off in the game.

straight, and it's a one in a million chance but if you have enough people playing someone will find it!"

For the CD32 version, the brothers created their own digital soundtrack, one of the first for a computer game. Anyone that's never heard it should definitely check out tracks like *Drop The Bomb* and *Fast Jet Fever*, a spoof of perhaps the only other well-known song by Kenny '*Danger Zone*' Loggins. "I wrote the lyrics and Adam did the singing mainly because he was less bad at singing than me," Aaron laughs. "*Fast Jet Fever* was a mickey-take of *Danger Zone* from *Top Gun*. If you ever read the lyrics to that song it's hilarious, he's actually gone through every gung-ho flying cliché under the sun. So I thought 'I can do better than that!' *Drop The Bomb* was a Beastie Boys-esque 'let's go and bomb stuff' anthem… but it was also around the time Bros were doing their *Drop The Boy*. I guess it could also be thought of as a sort of anti-nuke song with the duel-meaning of the title. In the game if you select the nuke, which you only get a limited number of uses of, the soundtrack automatically switches to that song to give you a hint of what you should do with it…"

» [Amiga CD32] Dogfighting in the F4 Phantom.

The nuke is the ultimate expression of the over-the-top pyrotechnics in a game where enemy targets erupt in a mass of fiery explosions, and your plane goes down in spectacular style resulting in a massive crater in the landscape. "We had been watching a film called *By Dawn's Early Light*, a movie about a B-52 heading to Russia on a nuclear bombing mission," remembers Aaron. "At one point they get a MiG on their tail so they get this crazy idea to drop one of the smaller nukes on the side of a mountain while they duck down the other side and it takes out the MiG. So you can actually do that in *Jetstrike*. The entire sprite budget was spent on blowing up things and of course you could take out targets by just flying your plane into them at high speed, as long as you remembered to bail out first!"

Despite the critical acclaim heaped on the various iterations of *Jetstrike*, notably the CD32 version, Aaron reveals the brothers unfortunately received little commercial gain from their two-year stint creating it due to publisher Rasputin going into receivership. "We were still working from our parent's house but that was actually being repossessed at the time," he reveals. "So it was just a case of cramming out what we could, and if we'd not loved the game so much, we'd have just canned it." The pair managed to put out just one more Amiga game, *Base Jumpers* before their company, Shadow Software folded.

Nowadays, the brothers have returned to creating games in the guise of their new studio Strange Flavour, producing titles like the Xbox 360's *TotemBall* and the multi-million selling *Flick Fishing*, one of the first touch-screen fishing games on the iPhone. *Jetstrike* has served as an inspiration for recent games like *Bushfire*, based on the fire-fighting mission in the Aerolympics section of the game, and *Any Landing*, a plane-themed iOS game where crashing spectacularly nets you the highest scores . "Like a lot of game developers, we like writing the games we want to play," says Aaron. " And what of a new or updated version of *Jetstrike* for the future? "We get asked all the time for *Jetstrike*-style games," says Adam. "We don't actually have the rights to *Jetstrike* itself but we have got an idea in the pipeline for a more *Jetstrike*-like game we'd like to do…" Watch this space folks. ✱

» [iOS] Strange Flavour's recent *Any Landing* was directly inspired by the spectacular crashes of *Jetstrike*.

SIX DEFINING JETSTRIKE MOMENTS

The moments that had us fist-pumping the air

PICKING YOUR PLANE

■ For an arcade style shoot-'em-up the amount of flyable aircraft you get is dazzling, from the 40 different machines in the original Amiga 500 version to around 60 in the A1200 and CD32 releases. And picking the right one for a specific mission is crucial, particularly as some are completely unarmed.

YOU ARE HERE

■ Part of the fun of the *Jetstrike* was seeing what kind of monumentally spectacular (and painful looking) crashes you could achieve, either through enemy fire or your own blind stupidity. And the game would always praise your efforts with a pithy one-liner and point out exactly where you ended up.

BOMBS AWAY

■ One of the most enjoyable aspects of *Jetstrike* is bombing ground targets, from armoured convoys to bunkers, battleships and even SPUDD's propaganda radio station. And there are loads of weapons to try from, you can use Harpoon missiles, tactical nukes, and even a *Dambusters*-style bouncing bomb. Sweet!

TALK TO ME GOOSE!

■ Of course, another highlight of the game is emulating Maverick and taking an F-14 Tomcat out for a spot of dog-fighting, while the Kenny Loggins pastiche *Fast Jet Fever* blares in the background. Although we haven't quite been able to fly upside-down over any MiGs just yet… give us time.

AEROLYMPICS

■ The Aerolympics minigame was a bonus mode where the aim was to fly light aircraft such as the Gee Bee racer and the Acro Star jet (of *Octopussy* fame) in a selection of randomised stunt missions. These included nabbing floating ballons, flying through barns and dropping spies behind enemy lines.

DON'T MESS WITH THE DRUIDS

■ Should you take it upon yourself to bomb the Stonehenge-like monument that crops up early on in the game you'll enrage not only Spinal Tap's Nigel Tufnel but also the local druids. And as a result of your nefarious monument-flattening deeds they'll curse the skies to be foggy forever.

CLASSIC MOMENTS

Moonstone: A Hard Days Knight

» **PLATFORM:** AMIGA » **DEVELOPER:** BULLFROG PRODUCTIONS
» **RELEASED:** 1993

One of the greatest things about *Moonstone* is just how epic the whole game feels. This in part is thanks to an incredibly moody soundtrack by the late Richard Joseph, but it's also down to the excellent animated opening that sets the adventure perfectly. As the sombre score builds, cloaked druids make their way into Stonehenge. As they enter the holy site, the perspective moves overhead, only to cut to a bearded druid who summons lightning as his followers chant around him. A knight soon enters the sacred area and kneels so he can be anointed. It's a simple sequence, but an extremely powerful one that lingers in the memory for quite some time. ✱

BIO

There were plenty of one-on-one fighters available for the Amiga, but few were as epic, involved, or as downright gory as *Moonstone*. Created by Rob Anderson, *Moonstone* had you playing as a knight who must retrieve the fabled stones of the title, whilst fending off the advances of three rivals. While Mindscape's game was also released on the PC, it's the Amiga that many gamers associate it with and it proved that one-on-one fighters could have depth to them.

MORE CLASSIC MOONSTONE MOMENTS

"I'm the map, I'm the map"

The Moonstone's needed to gain access to Stonehenge aren't the easiest items to find, meaning you'll need to use the huge overhead map. Each turn you can choose to visit one of the game's many locations in the hope of retrieving a stone. You must be wary though as three other knights are attempting the exact same thing...

"There can be only one!"

If *Barbarian* taught us one thing, it's that every gamer loves to decapitate their opponents. *Moonstone* was no different, allowing a quick and easy win if you were able to separate a knight's head from his shoulders. It lacked the showmanship of *Barbarian* (no goblin appears to pull of your defeated corpse) but remains just as effective.

Gambling time

Everyone needs to take a break from all that hacking and slashing and the knights of *Moonstone* are no different. Should you wish to it's possible to visit the many towns and cities found across the kingdom. Once there you can choose to upgrade your weapons and magical items, receive healing or visit the local tavern and take part in some rather dodgy gambling.

So much gore

Barbarian may be well known for its bloody combat, but *Moonstone* takes it to the next level. The sheer amount of carnage that you can unleash as a tooled up knight is quite awesome and battlefields can look a right bloody mess once you've finished dissecting your opponents. It's extremely satisfying, particularly when tackling multiple enemies.

The Amiga Underground

If you only got your Amiga games from the high street retailer then you only knew about half of what made Commodore's machine so great. Retro Gamer looks back at the public domain scene and speaks to some of the people that were most invested in it

GLOSSARY

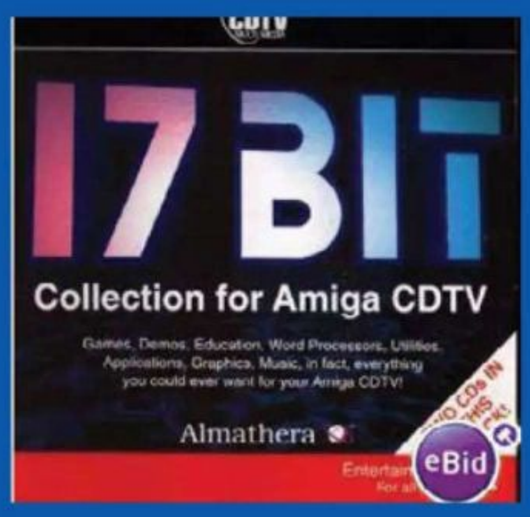
Your handy phrase guide to the Amiga underground

DEMOS – Real-time animations, making use of the Amiga hardware to show off the creator's programming prowess.

FREEWARE – Public domain software that is freely distributable. Users traditionally pay for only the physical media, ie the price of a disk.

PUBLIC DOMAIN/PD: An umbrella term for non-commercial software in free, or nearly/mostly free, distribution.

SHAREWARE – PD software that invites users to register with a nominal fee, often in exchange for extra/full content.


17BIT
Collection for Amiga CDTV
Games, Demos, Education, Word Processors, Utilities, Applications, Graphics, Music, in fact, everything you could ever want for your Amiga CDTV!
Almathera
eBid

When Jack Tramiel began producing home computers at Commodore, he did so under a brilliant mantra. "Computers for the masses, not the classes." The slogan was meant to indicate affordability, but with the Amiga it seemed to take on a whole new level of interpretation. Amiga was very much a computer of the people, embraced by its passionate user base for its entire life and virtually adopted by them for years following the demise of Commodore.

That commitment is epitomised no better than in the Amiga's public domain scene. Comprising all kinds of independently produced software, including applications, games and tech demos, it existed almost completely separately from the shelves of computer and game stores and was instead traded through market stalls, indie distributors and directly between creator and customer via mail order. It was an entire underground movement, by the people and for the people. And it felt pretty special at the time.

"Even though I knew very few Amiga people locally, it felt like the public domain scene was a community that thrived on every single Amiga user taking the initiative, making cool stuff, and going out of their way to share it with others," says Michael P. Welch, creator of one of the greatest indie Amiga games of all time, *Scorched Tanks*. "[The scene] had a very grassroots feeling, and it energised you to pitch in and make our little corner of the computer world a better place."

Perhaps the most remarkable aspect of this scene is that an ecosystem of distribution sprung up around it. With the Amiga's ability to daisy-chain lots of floppy disk drives together, duplication of home-developed software was a cinch, so public domain houses naturally sprung up to distribute software to the masses, using mail order adverts in Amiga magazines.

Martyn Brown, recently a director of partnerships and communication at Activision, got his start in the games industry by running an Amiga-dedicated public domain house called 17-Bit Software in the late Eighties.

"I worked in the Microbyte games store in Leeds from around Christmas 1985," says Martyn. "Around 1986, the Amiga grew to prominence and a few of us; myself and a few of the 'locals' (shop regulars) became huge fans. As part of this, I began getting in touch with a lot of the guys behind the scenes and getting tons of demos, music, art and such. Along with the early games, some of these were demoed in store,

» A recreation of Aminet's original welcome page. It hasn't needed to evolve much beyond this since, really.

Amiga software archive
Welcome to Aminet
Aminet is the Internet's largest collection of Amiga software. You're connected to Aminet's main site ftp.wustl.edu, located in St. Louis, Missouri, USA. We have all files online.
From here you access the
Recent uploads list
Tree of Aminet directories
Search tool for Aminet files
Charts of most downloaded files
Help files on Aminet
Mirror list of WWW Aminet sites
Directory of Amiga WWW pages netwide
Aminet welcome page / Urban Mueller

» Commercial Amiga games were great, but they were only half of what made the system so special.

» Jeff Minter's shareware games may not quite be synonymous with Amiga but he made a few, and they were pretty good.

initially simply to generate interest in the Amiga itself, which the shop sold.

"By April 1987 I think I'd finally managed to convince the shop owner, Mick Robinson (whom I eventually went on to co-found Team17 with in 1990) that the interest in the Amiga, the demos and selling games for it was such that it warranted a business of its own and as a result, 17-Bit was born, as an Amiga club which sold the machines, discounted games by mail and began to bundle up demos and collect them in a library. I also produced *The Update*, which was a monthly magazine on a disk, with articles, news, Amiga tips, music and such. It became very popular almost overnight.

"Since this was years before the Internet, I'd spend a lot of time collecting, swapping demos and music and such – and contacting the guys creating the work, in order to include it in the libraries. There was a lot of packing games up to post, dealing with enquiries and still occasionally helping out in the shop, which was downstairs."

While PD houses enjoyed a rise in popularity alongside the Amiga and its development scene, they were certainly helped by coverage in the magazines of the time. Marcus Dyson, now CEO of web developer Eleventeenth, was editor of *Amiga Format* in 1993 and tells us the role the magazine played in bringing public domain software to Amiga users.

"Clearly the cover disks were a very important part of all the Future magazines," says Marcus. "They were at first a commercial differentiator, and later they were an extension of the magazine's ethos onto the reader's screen. Remember in those days, by far the larger section of users did not have a modem – and if they did, they did not have the luxury of a corporate phone bill and days and days to trawl the BBSs.

"We put a lot of time and effort into those disks," Marcus continues. "They were not just thrown together, it wasn't just a matter of selecting the best PD/shareware that had caught our eye that month, and of course, no one saw it all. It was also a matter of making it all co-exist peacefully on a single disk and within a single menu system. Pat MacDonald and Nick Veitch put a lot of work in that."

"You know you've arrived in life when your game is on the cover of your favourite magazine"

Amiga magazines also reviewed public domain software, so we're inclined to ask whether staff writers turned their noses up and looked down upon such disks, in comparison to commercial games and applications. "There was a great deal of affection for it," says Marcus. "Some of the funniest, most impressive stuff was on those disks. And not all the commercial stuff was loved – in those days there was just so much stuff coming out and with no barrier to entry, and no platform holder approval process, there was a lot of dross. But PD also brought massive amounts of utter crap With zero barrier to entry, sorting the pearls from the chaff (to mix my metaphors) was quite a task."

"You know you've arrived in life when your game is on the cover disk of your favourite Amiga game magazine," says Michael. "Somehow I knew that *Scorched Tanks* was going to be on the cover of *Amiga Power 41* so I called the closest Amiga store that carried the magazine to check if they had it on the shelves and drove an hour and a half to buy all three copies that they had in stock. It was the absolute thrill of a lifetime. I can't remember how it got on the cover disk, but I'm pretty sure that they featured the game on the disk because they wanted it there."

The advantages of getting on a cover disk are obvious, and it's easy to imagine that creators would fiercely compete to get the attention of a magazine, but Michael's experience suggests the opposite. "Creators didn't compete so much," says Marcus. "On the one hand, a lot of them didn't feel as if they had a channel to speak to us directly – even though they did. All they had to do was pick up the phone any Tuesday. And on the other hand, they had their own routes to market: the PD/shareware scene was thriving."

Even without a commercial infrastructure, the public domain scene thrived because of the sheer number of passionate people involved, and hit games and demos spread across the globe in a viral nature. "I released the shareware version of *Scorched Tanks* on GEnie and the people in the Amiga scene spread it around from there," says Michael. GEnie was the General Electric Network for Information Exchange, one of a number of primitive online services at the time, but it was a system used by all types of home computers throughout the Eighties and Nineties. Where Amiga sharing really took off was with Aminet, an Amiga-only online repository set up in 1992 by Swiss student Urban Müller.

"When the internet was young, all file transfers were done by FTP," says Urban. "The most popular FTP server for Amiga software was ab20. larc.nasa.gov, where lots of people put their freely distributable software. But it wasn't organised very well. Almost everything was in a huge directory and many uploads had no documentation. So I built my own site where uploads were not visible until they were sorted into categories, where there was a list of recent uploads and where every upload had an accompanying text file. It quickly gained traction and completely took over when ab20 shut down."

» Magazine cover disks were a great entry into shareware.

As time passed on and a good number of enthusiasts took their Amigas online, Aminet only grew bigger. "Before, there were tons of different Freeware collections distributed on diskettes, the most well known one being the Fish disks," says Urban. "It was a pain to find stuff and none of those collections had even close to every program out there. With more people on the internet, however, a benign cycle started. More users started downloading from Aminet because it had much software, therefore more programmers started uploading to reach many users, which in turn attracted even more users. In the end, practically everything ended up on Aminet."

"The original server was in fact an Amiga running Amiga UNIX," reveals Urban. "However when we got popular, we could not handle the load so I wrote mirroring software and asked the community to make copies. When we became even more popular, we were kicked out of the university lab that had given us bandwidth, because we created more than half of the Zurich university's internet traffic, but found a new home in St. Louis. I kept doing the administration from Switzerland. For a while, we had the largest PD/Shareware collection for any platform, but we never knew how many users we had, since about 50 mirrors around the world copied us and we never got usage statistics from them. But all our users were Amigans, since we never carried other software."

» *Scorched Tanks* was a huge sharware success, and paved the way for the popular Amiga game *Worms*.

Of course, it was only a fraction of Amiga users who ventured online, so most still had to rely on physical media throughout the mid to late Nineties. Which is where the physical incarnation of Aminet came in. "I was contacted by a company called Walnut Creek who had done CDs for other platforms," says Urban. "They asked if they could put Aminet on a CD, and I had no problem

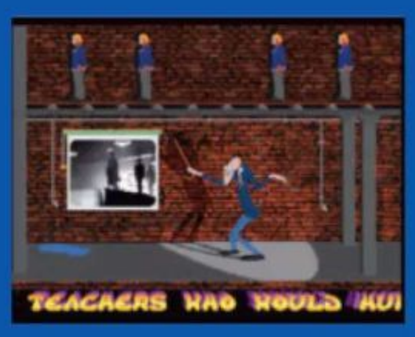
TOP 5 AMIGA DEMOS

Amiga demos weren't games of course, but they were another way for programmer to show off their skills and helped bring a lot of talent into the industry. Here are five of the finest...

STATE OF THE ART
1992, Spaceballs
While most Amiga demos were a technical showcase, *State Of The Art* focused on aesthetic quality instead, using rotoscoped images of a dancing girl, who morphs into geometric shapes in time to the music. "The way it combined imagery, music and typography, ultra-fast jump cuts. I loved it," says Marcus Dyson.

9 FINGERS
1993, Spaceballs
So called because the programmer hurt a finger while coding it and continued to the end with just nine fingers, this demo is actually the spiritual successor to *State Of The Art*. It lacks originality, of course, but makes up for it with better visuals, including photo-real dancers. Incredibly distinctive design made this really stand out from the crowd.

HARDWIRED
1991, Crionics & The Silents
A seminal work that practically defined the demo scene for years to come, the epic *Hardwired* clocks in at nearly eleven minutes and runs the gamut of Amiga programming tricks, throwing around complex geometry like it was child's play. In 1991, this was jaw-dropping stuff and it was hard to believe it fit on just two floppy disks.



PINK FLOYD – THE WALL
1991, Split Dimension
Inspired by the hugely popular album of the same name and supplied on a whopping six floppy disks, *The Wall* naturally attracted a lot of attention. In truth, those disks didn't hold very much because most of the space was taken up by audio samples from the album. Still, the mixed media video was a decent showcase of Amiga's versatility.

DESERT DREAM
1993, Kefrens
Possibly the greatest of Amiga demos, *Desert Dream* had it all. A fantastic energy permeates the entire demo as its catchy music carries you through a rollercoaster of impressive technical showcases. Even years later, it's crazy to think Amiga was capable of these tricks. And the coders knew it, openly bragging on-screen about what they'd achieved!

A Moment With Eric Schwartz

Eric Schwartz discusses his favourite "Animations"

Eric Schwartz wasn't really part of the demo scene, as he created animations on an Amiga rather than by programming one. But he was nonetheless a popular participant in the Amiga's underground scene thanks to his series of humorous, classic-style cartoons. **Retro Gamer** catches up with him

How did you first become aware of the Amiga? Did you fall in love with it straight away?
Pretty much. The first exposure to the Amiga I remember was a 1985 article in the general-interest magazine *Compute!*. I was so impressed with the graphics shown in the article, I wanted an Amiga system from that moment on, though I had to wait until 1989, when my family got me an Amiga 500.

What kind of software/hardware did you use to make your animations?
My usual software for the majority of my animated works was Deluxe Paint 3 and 4 for graphics, and Moviesetter to organize the pieces into a final production. I've used, and occasionally still use a wide variety of Amiga software in the production of animations and still graphics.

How did you distribute your Amiga creations in the early days?
I attempted to distribute my works by mail once, but little came of that. Early on, I gave copies of my animations to user groups and the local computer shop, where they spread worldwide via Usenet and the online bulletin board systems of the day.

You're most famous for your animation work on Team17's *Superfrog*. What are your memories of the project?
I was contacted by Team17 about creating an animated intro to their then-upcoming game. They apparently thought my style would fit well with *Superfrog*. I was lucky to see early materials related to the game, which I used as a basis for my animation. Many of my background graphics were reworked, presumably by Rico Holmes, which gave a professional consistency to the work.

What were some of the challenges involved?
That work was done before I had access to the internet, so communication between Team17 and myself was conducted by international mail. I wish the communication was a bit more frequent to aid in ironing out a few flaws in the final product.

The animation I submitted used the same Moviesetter tools as my other works, and the game intro was custom-programmed, which resulted in some differences from my original intentions. They also did the game-ending animation on their own, which I wish I had had the opportunity to help with. Later on I re-used and improved my graphics and put out my own version of the intro, *Superb-frog*. It was part showing off the intro as I original intended, and part parody, including a brief shot at *Sonic The Hedgehog* which was not used in the official intro.

UNSPORTING

"Probably my best of the *Aerotoons* series, probably because it works alone as a cartoon without asking the audience to understand some obscure aviation-related in-joke."

THE ANTI-LEMMIN DEMO

"Perhaps my best-known work in its day. Notable because the *Heart And Soul* tune played can sound decent or horrible depending on the speed of the machine playing the animation."

A DAY AT THE BEACH

"The *Flip The Frog* cartoons were my tributes to the classic studio short cartoons, adapting an early Thirties character created by Ub Iwerks. I think *A Day At The Beach* best fit the idea I was trying to emulate."

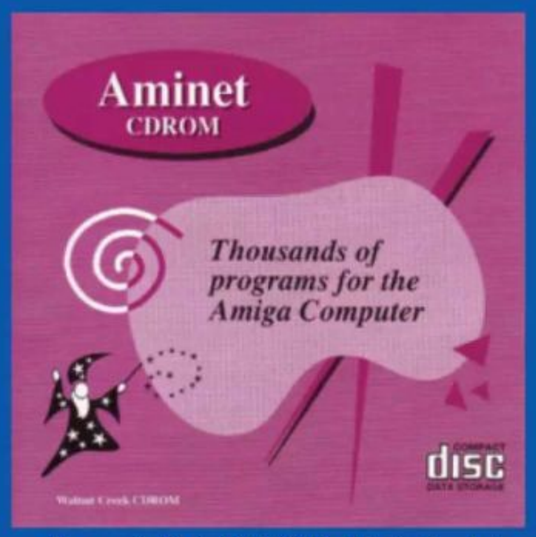
PLIGHT OF THE ARTIST

"*Plight Of The Artist* is one of a very few animations with Sabrina [Eric's comic strip character found at Sabrina-online.com] and one that pushed the abilities of the Moviesetter animation software to its limits."

STILL ALIVE

"Setting animation to a song was a different and exciting experience. *Still Alive* is a tribute to the diehard attitude of Amiga users through overwhelming adversity."

» The four *Assassins* CDs were essential for shareware game fans, especially if you owned a CD32.



» The very first Aminet CD-ROM in all its pink-hued glory. It was certainly striking.

with that. When we needed more disk space they, along with the community, pitched in for bigger hard drives. However, they didn't make the CDs often enough, so I took over with the help of German publisher Schatztruhe."

In fact, the shareware system, whereby users would post money back to creators in exchange for extra content, if they liked a game or application, kept physical media and communication thriving in the Amiga community for years. "When people sent me a letter with money in it, I printed up disk labels, copied floppy disks, and mailed packages all over the world," says Michael P. Welch. "It was a lot of fun to show up at the post office in Vestal, New York with a gigantic pile of orders to ship worldwide.

"I used to keep maps on the wall of both the United States and the World. Whenever someone sent me a shareware payment for *Scorched Tanks*, I would mark the location that the letter was sent from on the map with a florescent orange sticker. It was amazing, as the orders kept coming in, to watch the map light up."

The shareware system relied on a trust in the user to send off money for the software they enjoyed, and, as cynical as we are, we have to wonder if it actually worked. "I think that the shareware business model on the Amiga scene was absolutely amazing for a college student. Not only did I make enough money to buy some neat Amiga gear that I never could have afforded otherwise, but I learned that people really liked my work," says Michale. "That knowledge was worth more than gold. The same thing seemed to happen with Ed and Al Mackey with the release of their *Megaball* games. They didn't make enough money to live off of it, but it opened their eyes to the possibilities."

"I don't think many people got serious money, although for most that probably wasn't the primary motivation," Urban concurs. "My first Aminet CD was produced at cost and buyers were asked to send money if they liked it... Which didn't work out; only a tiny fraction of the buyers did that."

"Lots of people paid in some way, because buying from a library was the predominant model," says Marcus. "But I can't say how much of that money was routed back to developers. And the magazines didn't help. We 'gave away' a dollop of PD/shareware every month and having paid £4 for the mag, users felt as if they had paid for it. I don't know any shareware developer who bought a Porsche, not until they graduated to real games development."

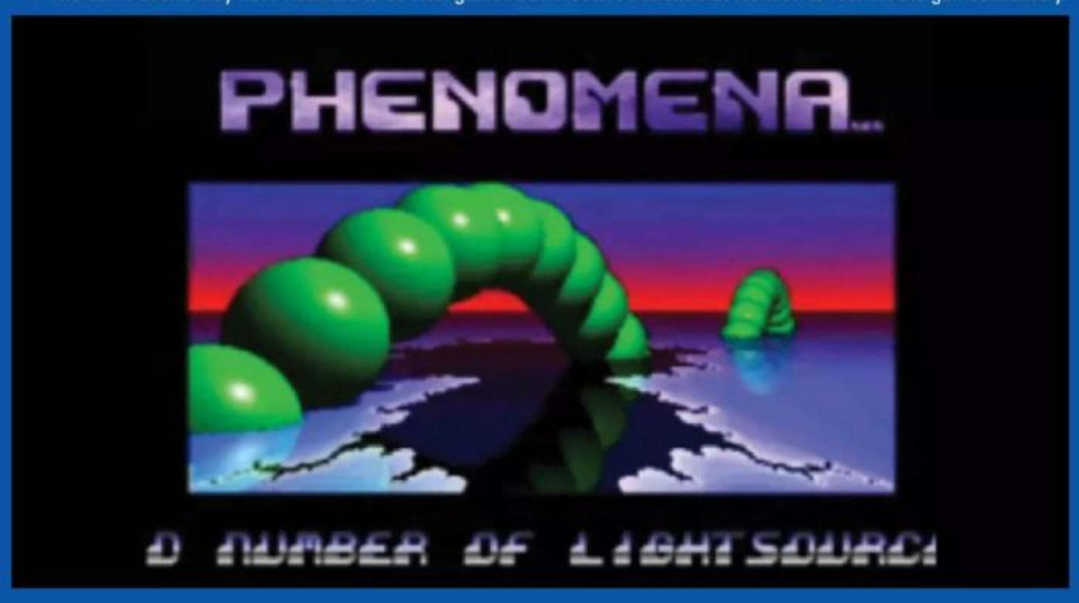
Of course, some did exactly that. Martyn Brown and his associates at 17-Bit Software, for example, soon took their talents and turned them into a commercial enterprise at Team17. "I think famously I spent a lot of time putting things together by Allister Brimble, Rico Holmes and others – and we became firm friends and the basis of the talent that went on to create a bunch of stellar-performing Amiga games in the early Nineties," says Martyn.

In fact, one of the biggest developers around today, *Battlefield* and *Mirror's Edge* creators DICE, have their roots firmly planted in the Amiga scene. The developer started out as a group called The Silents, a 'demo' group who instead of creating games or software per se, would program the Amiga to output amazing tech demo videos to show off what the system was really capable of.

Though not making games initially, demo creators naturally learned so much about hardware and programming that their skills naturally transferred to the world of videogames where technology and art walk hand in hand.

"On the Commodore 64 and the Amiga, it was super easy to just play games and be entertained," says Michael. "But once you started watching demos, you got the impression that real people

» The demo scene may have had little to do with games but it fostered talent that went on to work in the games industry.



Top 10 Amiga PD games

Half the fun of the public domain scene is in discovering your own diamonds in the rough, but here are a few to get you started

SCORCHED TANKS
1994, Michael P. Welch
Scorched Tanks, better than *Worms*? That's a debate that will go on forever in the Amiga community, but Michael Welch's artillery clone is different enough – thanks to a wide range of weapons and a shifting, destructible land – that it proudly stands alone. The sequel (currently in development) is long overdue.

ALIEN FISH FINGER
1995, David J. Cruickshank
An old school platform-shooter, *Alien Fish Finger* is one of those shareware games that could have stood shoulder to shoulder with the commercial games, if it had been made a few years earlier. The detailed pixel graphics are extremely special, squeezing loads of action into a single screen and leaving plenty more space for stuff to just look pretty.

STAR TREK: THE GAME
1989, Tobias Richter
The sub-title was a bit misleading as there wasn't all the much to do in *Star Trek*, and the gameplay was certainly less Kirk and more Chekov but there was something quite addictive about looking out of that view screen and clicking around the Enterprise's controls. It seemed like practically everyone with an Amiga had this disk at some point.

PARACHUTE JOUST
1992, 17-Bit Software
One of the best things about public domain games was that they didn't have to be all that serious, or long, when they just cost the price of a floppy disk. *Parachute Joust* is one of the most memorable of these interactive jokes and was a game in which two skydivers fight over a parachute before one of them splats on the ground.

DOCTOR STRANGE 2: THE RETURN OF DOCTOR STRANGE
1995, Ian West & Jonathan Eggelton
The first game – a simple *Lode Runner*-alike made for a magazine contest – was decent enough, but this sequel was amazing. The single-screen levels expanded into a big multiscreen world to explore, while an in-built level editor added further longevity.

» *Megaball* was a fantastic *Arkanoid* clone for Amiga and was a huge influence on Mike Welch's PC game *DX Ball*.

THE WORLD'S BIGGEST-SELLING AMIGA GAMES MAGAZINE
AMIGA POWER
A MAGAZINE WITH ATTITUDE
PUTTY TRAINED...
AND READY FOR ACTION!
See for yourself why Putty Squad is worth 91% by trying our fabulous, fully pliable demo!
PUTTY SQUAD
MINE RUNNER
EMPIRE SOCCER
SCORCHED TANKS
PLUS! Universal Ice Chaos Silver 3, Ring's Quest 2, and more!
ISSUE 41

» The issue of *Amiga Power* that *Scorched Tanks* was on.

like you were writing amazing stuff with graphics and music, just for fun. It gave you the feeling that writing games was something you could do by yourself, and that anything was possible."

"The Amiga's open systems, and availability of free and cheap development tools gave aspiring developers an easy way to get coding," agrees Marcus. "The demo scene gave them a way to get seen. Countless developers made their entry to the industry this way, and many of them are still coding today.

"The lack of an equivalent did hurt the console and game market for a while," he adds. "Things are a little better today because of the mobile app scene. And while it's not turning out a lot of tech demos, it is enabling people to get on the first rung of the ladder, and make a name for themselves."

> **"I think the nearest modern equivalent is the AppStore"**

As Marcus suggests, shareware and public domain games never really died out, they just evolved. Now, instead of trading games by post and paying by cheque, digital distribution, online payment and smartphones have given the shareware scene a new lease of life.

"I think the nearest modern equivalent is the ecosphere of the App Store," says Martyn Brown. "It is a very open platform and once more, micro-studios as little as one person can create a game or utility and put it in the hands of thousands, tens of thousands or many more. After the relatively closed shop of the previous 10-15 years, that's a great relief. But in terms of creativity, the internet totally changed how it was consumed. Alongside that, the technology improved in terms of audio specification, 3D technology and both pixel & colour resolution so much so that it wasn't as cool to see what could be done any more – other than a few groups who kept living the dream."

"I'd say that the mobile scene is now the way for aspiring coders to make a name," agrees Marcus. "But the objectives are different, everyone is about making something profitable or useful. It's less playful, less fun."

One person still having fun, however, is Michael P. Welch, who has made the transition over to App Store development but also keeps one foot in the PC shareware scene, developing exactly the sorts of games he loved in the Amiga days. "I still consider myself a shareware game developer. I still release a free version of my games that are 100% playable and fun," he says.

"People may not call it shareware anymore, but giving a game away for free on the iPhone in the hopes that people play it more than once, then offer them in-app purchases to unlock things is still the same business model. Give it away for free with no strings attached, offer something to the fans that they can pay for, and perhaps you will learn that people really do care about your work and are casting their vote for you to keep making games. It sounds like the good old shareware business model to me."

Yet, as Marcus suggests to us, it's not all about business, and Michael thankfully reassures us that the fun and community spirit of the Amiga scene still very much lives on in the relationship between creator and user.

"With *Scorched Tanks*, people sent money in the envelope along with a personal letter of thanks," he says. "In fact, I am still friends with the very first person who sent me money for *Scorched Tanks*. With my PC releases *DX-Ball* and *Pocket Tanks*, I get these amazing letters of thanks from parents to use my games to help their children regain their hand-eye coordination after terrible accidents or aid in the recovery of heart surgery. It's very personal how people respond to shareware games, and you'll never get that releasing a commercial game."

ROLL OR DIE
1992, Animators
You certainly wouldn't find a game like this on the shelves of Our Price, but that's what made PD great. This harmlessly tasteless game featured a number of Olympic parody mini-games played by athletes in wheelchairs. By way of a nice touch, the title screen included an option to format the disk, for the easily offended.

WIBBLE WORLD GIDDY
1993, Phil Ruston
If you couldn't tell from the thinly veiled title, or the above screenshot, *Wibble World Giddy* was intended to be a parody of the *Dizzy* games. In reality, it didn't really crack jokes at *Dizzy*'s expense so much as it merely ripped it off. Still, if you want a decent-looking, unofficial *Dizzy* clone you could do a lot worse.

THE SHEPHERD
1993, Obbe Vermeij
Pulling off a gobsmacking clone of Bullfrog's *Powermonger* with such sumptuous visuals was impressive enough, but this shareware classic went even further with a great twist to the game design. In this, players would grow flowers then protect them by breeding and herding animals toward invading opponents.

DOGFIGHT
1996, Richard Ling
The Amiga had quite a few of these two-player only air combat games but *Dogfight* was considered by most to be by far the best. A nice sensation of flight made it fun to play on a fundamental level, but it's the surprising depth – including the ability to take off backwards or fly off-screen – that made it such a hit.

ORK ATTACK
1994, Ian West & Jonathan Eggelton
A remake of a little-known C64 game in which the idea was to stop invading orks from scaling your castle walls, armed only with your sword and the rocks that are given to you at the top of the wall. This Amiga variation was a vast improvement over the original thanks to gory yet cartoonish visuals and gameplay that was even more addictive.

Turrican

DISCOVER HOW THE CLASSIC C64 GAME SHONE ON THE AMIGA

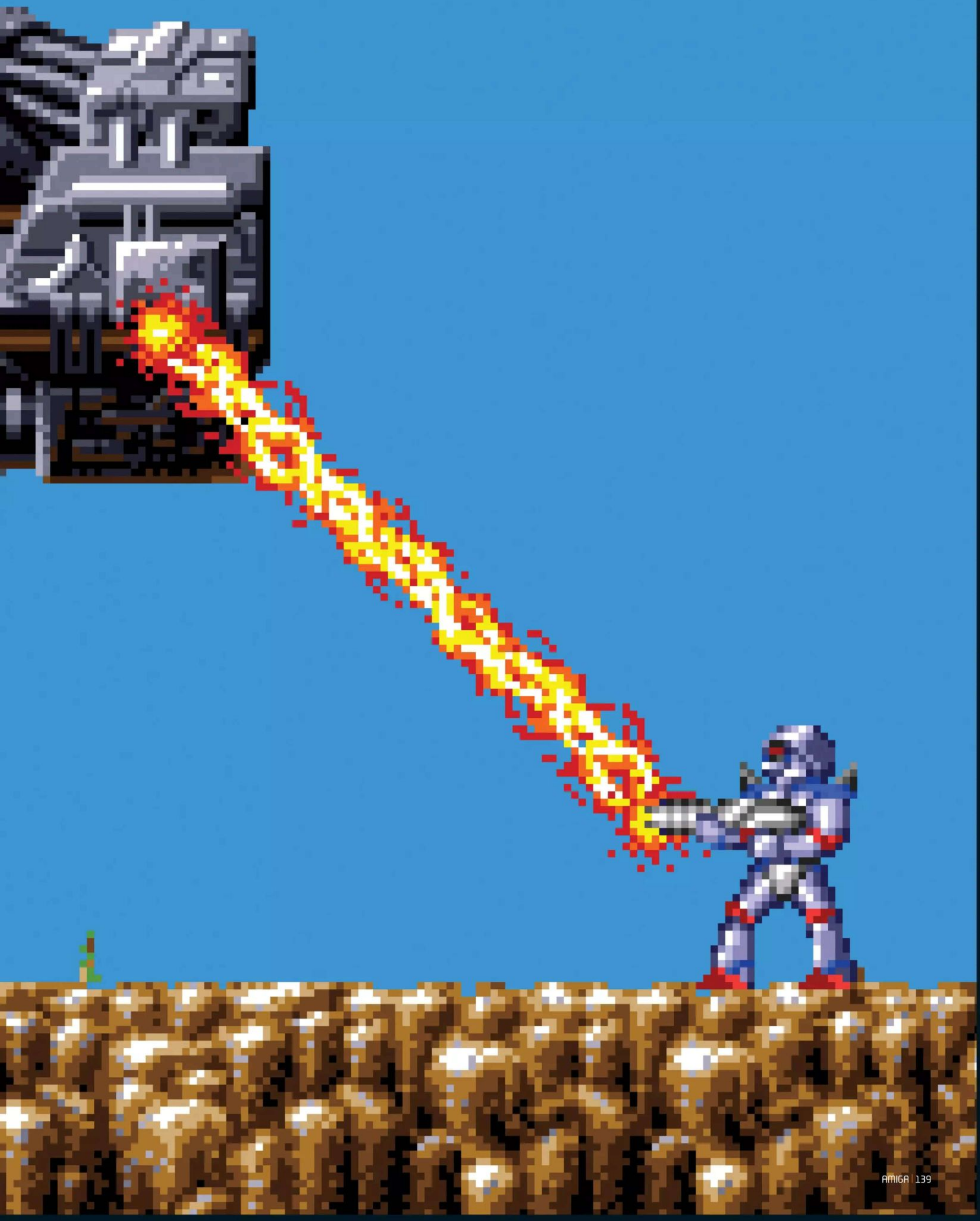
» AMIGA » RAINBOW ARTS » 1990

***Turrican* may have started off life on the Commodore 64, but it typified everything that was great about the Amiga.** Created by Manfred Trenz, it took inspiration from *Metroid* and an obscure Konami arcade game called *Psycho Nips Oscar*, but had enough of its own elements to make it stand apart from the games that had inspired it.

Technically impressive, it boasted astonishingly smooth scrolling and some incredible sprite design that made it feel like some forgotten arcade classic. It also received a stunning soundtrack courtest of Chris Hulsbeck. Factor 5 did an incredible job with the port, and while the original 8-bit game was more impressive from a technical viewpoint, the Amiga version is arguably the best one, effortlessly showing off Commodore's 16-bit baby.

The real beauty of *Turrican* comes in its huge levels and smart weapon design. While it's possible to simply race from left to right for the most part, the structure of each stage is such that you really want to explore every last nook and cranny. Secrets are hidden everywhere and you'll often find goodies tucked away in the most unlikely of places. *Turrican's* exploration is matched by some equally impressive combat. There are a large number of power-ups to pick up, while it's possible to turn into a small ball and drop bombs, like *Metroid's* Samus Aran. Another nice touch is that it's possible to create an insanely powerful laser by simply holding down the fire button. This secondary weapon is extremely useful and can make short work of *Turrican's* imposingly huge bosses.

It all adds up into a frenetic experience that proved the Amiga was more than capable of creating unique arcade-like experiences that could give the rival consoles a run for their money. ✱



CLASSIC MOMENTS

Ruff 'N' Tumble

» **PLATFORM:** AMIGA » **DEVELOPER:** WUNDERKIND
» **RELEASED:** 1994

There aren't too many bosses in Ruff 'N' Tumble, but the ones on offer are pretty cool. In fact, if we're completely honest then we have to admit that we've a bit of a soft spot for this cute mechanical owl from the finale of the Forest world. He's not only gigantic, but amazingly well animated, further highlighting the skill of developer Wunderkind. His swooping gait and homing laser attack will certainly flummox you at first and cost you a fair few lives, but he's not too hard to dispatch, providing of course that you know what you're doing… Just grab a decent weapon as you exit the last of the Forest levels and position yourself at the bottom-left-hand corner of the screen so that you can leap over his carefully aimed blasts. After a while you'll get the better of him. Thing is, he's almost too nicely designed to blow into tiny pieces. Almost…

BIO

Appearing late in the Amiga's commercial life and criminally overlooked by gamers jumping ship to the console bandwagon, *Ruff 'N' Tumble* was a frenetic and well-crafted platform shooter by talented developer outfit Wunderkind.

With superb art design and animation, a pumping soundtrack, and some vast scrolling levels, Ruff Rogers' bullet-fuelled caper is a belter. Mike Bevan argues the case for *Ruff 'N' Tumble* for offering some of the best moments in any Amiga platform shoot-'em-up of all time.

MORE CLASSIC RUFF 'N' TUMBLE MOMENTS

Ruff n ready

Ruff 'N' Tumble is, put simply, a rollicking good action game. It's fast and smooth, extremely slick, and impossibly pretty (especially considering it's a non-AGA title.) Ruff, as a character, oozes personality – look at the attention paid to animating his quiff, and the agonised expression on his face when he bites the dust.

Meet the Tinheads

Mechanised wasps, bats, and piranhas are some of the many hazards faced, but it's the bipedal Tinheads that make the biggest impression. Witness the gas-mask-faced, blunderbuss-carrying soldiers and the scarily tenacious American-football-player types. If you meet one, just pray your weapon power doesn't run out before its armour plating does...

I've got a rocket launcher

We love the rocket launcher. It showers missiles across the screen, leaving multiple smoke trails, and destroys most enemies with one shot. Ruff can shoot in several directions, including upwards and at 45-degree angles, by holding down fire and aiming with the joystick, so you can dispatch foes on platforms above or below you. Very handy...

Cave adventure

Much as we love the Fantasy Forest stages, which serve as a gently intimidating introduction to *Ruff 'N' Tumble*, we have to applaud the fiendishly clever design of the Cave world. Secret passages to bonus-filled caverns, underwater bits, lava pools, self-destructing extra lives, and long corridors to the exit make it a fantastic stage that lingers long in the memory.

THE MAKING OF...

WALKER

Developed by the Scottish software house behind Lemmings and Grand Theft Auto, as sci-fi shoot-'em-ups go, Walker was anything but pedestrian. Mike Bevan talks to designers Ian Dunlop and Neill Glancy

IN THE KNOW

- **» PUBLISHER:** Psygnosis
- **» DEVELOPER:** DMA Design
- **» RELEASED:** 1993
- **» PLATFORM:** Amiga
- **» PLATFORM:** Shoot-'em-up

There's a moment near the beginning of *Walker* as our plucky mechanised killing machine enters war-torn Berlin circa 1944. Planes fly overhead dropping tiny paratroopers that drift slowly down the screen, chucking the occasional grenade your way. Until, that is, you let rip with your 30mm calibre cannons on their canopies and they plummet to earth with an unedifying splat. It's the first of many violently absurdist little touches in a game that pits a 40-foot cross between ED-209 and a giant robot chicken against hordes of hopelessly outgunned ant-like troops through past, present and future combat zones. "I blame Paul Verhoeven," laughs programmer Ian Dunlop, citing the less than subtle Dutch director of *Robocop* and *Total Recall*. Like two other famous products of Dundee-based developer DMA Design – *Lemmings* and *Grand Theft Auto* – *Walker* is a game with a warped sense of humour and a massive body count. An Amiga exclusive, its graphic carnage and detailed animation made for a memorably apocalyptic romp that stood out in the ranks of Nineties 16-bit shooters. "I was looking for contract work in 1990 and found myself at DMA Design talking to David Jones and Scott Johnson among other people," remembers Ian, explaining the genesis of the game. "They were pushing some tech that Scott had come up with. He had modelled a 3D texture mapped 'Walker head' (using 3D software he wrote) and this allowed him to render it out in different orientations. This was quite unique at the time. Those 3D frames/positions were subsequently turned into sprites which gave the *Walker* its unique ability to look around the pseudo-3D environment. So, the conversation went something

» Can it be so hard to find a parking place in downtown Berlin on a Saturday night?
028250
TEMP
SHIELD
GUN TEMP - NOMINAL
DANGER
LOCK ON

» This train is completely harmless, but hey… it's probably carrying Nazi gold bullion or something.

» Walker pilots laugh at your primitive and flammable Zeppelin technology.

» The LA levels have a definite air of *Terminator 2* about them.

like this: 'Hey, let's create this cool side-scrolling shoot-'em-up featuring this Walker character that Scott has made.' That was literally the entire vision."

"I'm not sure they even expected a game out of me," confides Ian. "I was a single developer working contractually for £500 a month. At the time that felt like a lot of money but looking back on it, it was a very risk-free proposition for DMA Design. I couldn't complain as it was great working for DMA and I did eventually get a salaried job out of it at the end." However it took the skills of an external artist, Neill Glancy, in tandem with Ian, to fully flesh out the *Walker* universe. "I worked in a computer shop in Scotland selling games and hardware," recalls Neill. "Ian was a customer and we would chat about games. He had been working on *Walker* for a while but felt the graphics could be better. I had been working on pixel art games and projects for some years so offered to create an entire set of level graphics for the game.

"These were the most complex pixel graphics I had ever made with motion blur and dynamic lighting and shadows. *Terminator* was a big influence on the style as was *Akira* in the work I did for the project. Ian installed the graphics and was thrilled… they looked really cool and the little men were a tad bigger and easier to see die! Ian took this build to DMA to show Dave Jones." But although Jones was impressed, because Neill was not an official DMA employee some of his work for *Walker* was curtailed for alternative designs by the in-house art department. "During development I would hang out with Neill and we would always play games and discuss game development," explains Ian. "Neill was great at bouncing ideas off of. He even created a unique vision for the art of the game based on some of *Terminator*, but unfortunately I couldn't get DMA to use his artwork due to office politics. But I did my best to get the art team working on *Walker* to adopt some of Neill's stuff – so it sort of made it in there."

One obvious similarity that *Walker* shares with *Lemmings* are the tiny animated 'stick man' characters which in both games display a desire to bite the dust in the most irresponsible ways. Whether running towards your gigantic murderbot only to get mown down by machine gun fire, shooting from buildings or attacking on jet packs, their average life expectancy is somewhere on a scale of nanoseconds. "I think the scale of the game that DMA had envisioned, given the size of the Walker, called for small enemies," admits Ian. "It wasn't something I thought about for a long time given the 'size' of the *Walker* and being exposed to *Lemmings*…"

"We really enjoyed 'pixel mischief'," chuckles Neill. "And *Lemmings* showed us that doing sick things to little sprite creatures was fun and funny! Pixel ▶

WALKER 101

■ *Walker* puts you in the pilot seat of a bipedal killing machine with an uncanny resemblance to a giant metal chicken. Equipped with a *Terminator*-style time drive the Walker must fight through four distinct levels – Berlin 1944, Los Angeles 2019, The Middle East of the present day, and the Great War of 2420. Along the way you'll be attacked by scores of tiny troops and their puny war machines. Unusually for a 2D action game, *Walker* uses a mouse-controlled targeting system for precision carnage.

"Terminator was a big influence on the style as was Akira in the work I did for the project"

Ian Dunlop

MIGHTY MECHS

Seven assorted robo-warriors from alternative mecha-themed videogames

ASSAULT SUIT

■ A rugged and versatile combat mech fighting for the Pacific States Marine Corps in Konami's *Cybernator*, or *Assault Suits Valken* as it was known in Japan. The Assault Suit is well-armoured and can be equipped with rocket boosters for space flight.

AT-ST

■ The not-so-mighty scout walker from the *Star Wars* saga is possibly the only mech to be defeated by small furry teddy bears. Also, in the *Return Of The Jedi* arcade game you get to pilot your own stolen AT-ST as Chewbacca. Just mind out for those logs...

CYBERBOT

■ Debuting in Capcom's beat-'em-up *Armoured Warriors*, these brawling machines later got their own spin-off, *Cyberbots: Full Metal Madness*. There's an impressive range choose from including this tank-like creation, Guldin.

SLUGANOID

■ This beast appears in *Metal Slug 2* as our heroes enter an Egyptian tomb. Equipped with twin machine guns and a powerful cannon, it's great for taking out the boss found at the end of the level.

WANZER

■ The main hardware of Squaresoft's *Front Mission* series, these mecha derive from the German word wanderpanzer or 'walking armour'. Endlessly customisable, they fight alongside standard military vehicles.

TIMBER WOLF

■ Probably the most iconic vehicle from the *MechWarrior* videogame series, this mean-looking mech carries a deadly arsenal of machine guns, lasers and shoulder mounted long-range missiles and is the weapon of choice for most Clan Wolf pilots.

TITAN

■ Drawing on decades of design across videogames, the signature moment of *Titanfall* comes when your colossal charge comes crashing down and your view changes from on foot to the controls of a giant mech.

▶animation was a very time consuming process, though… In the research and development work I did on the game I also baked in lighting and shadows into frames of animation as well as motion blur. This was quite unheard of at the time as most games when a gun went off you just saw a muzzle flash. Now when the muzzle flashed it illuminated the shooter as well as the ground he was standing on and cast his shadow behind him. This work was heavily inspired by *Akira*. Unfortunately it didn't make it into the final game as it would have been too much work to overhaul all the prior content that was already in place. Although this was quite a bit crushing it had a silver lining as Dave Jones hired me as a designer. From there I went on to work on [the unreleased] *Walker 2* as well as a music game proposal for the newly-minted Rockstar Games in Dundee"

» This tank was a stumbling block for many players. Hint: take out its tracks as soon as you can.

Compared with many other scrolling Amiga shoot-'em-ups *Walker* stood out in offering a unique control system combining a mouse-controlled gun reticule and keyboard or joystick control over movement of the mech. It was also unusual in using backgrounds scrolling from left to right, against the grain of the traditional arcade style shooter. "I wanted to allow the player to have full freedom to shoot anywhere on the screen, but at the same time move the Walker," Ian explains. "It worked without the need for any joystick peripherals. I think it also gave the gameplay a bit more depth. I like adding layers of detail

» Watch out for jets dropping napalm…

» Mobile missile launchers and A10 Thunderbolts can be very bad news.

» Oh no! The Walker makes a cameo appearance in *Lemmings 2: The Tribes*.

like that. That's why you could also lock-on to enemies. Regarding the scrolling, I seem to remember that the Walker orientations were only ever rendered facing from right to left and somewhat remember Dave Jones saying that he wanted it to be different. I do recall getting some tips from Dave and one of the other programmers on how to do efficient full-screen scrolling."

Ian also tells us about the additional sections of the game that were later dropped due to time restrictions. "There was an underground platform section that was basically my rip-off of *Prince Of Persia* albeit featuring guns," he says. "The idea was that at the end of each *Walker* level you got out of the cockpit and went into an underground base. There were four parts to an explosive charge that you had to plant in key locations on different floors accessed via an elevator. Along the way you jumped across gaps, shot bad guys and placed the explosives. When the last explosive was placed you had a small fixed amount of time to escape. It was unfortunately canned because while it was fully functional, it was all programmer art and Psygnosis wanted the game out quickly because of piracy and sales fears and didn't want to invest the money to get artists to finalise all the artwork – which was really quite considerable."

***Walker* was also one of the last games released by Psygnosis that supported basic Amiga models, although those with memory upgrades got a little bonus.** "If you had more memory you got full speech between the Walker and HQ," says Neill. "This was recorded between Ian and me over walkie-talkies…" By the end of the project Neill was heavily involved in the layout of the game for the last two eras, the Middle East and futuristic 2420 levels, while Ian concentrated on enemy AI. Admittedly it's possible that some players will never have seen these last two levels, at least not without cheating. "I think the consensus was the game was too hard," confesses Neill. "But the classic design problem was offering enough challenge so you didn't blow through the content too fast. The game didn't have many levels so the difficulty ramp was quite steep. Now with the notion of difficulty levels and casual play it would be very different. Back then there wasn't a formal notion of Q&A. You just sort of banged away on the game as much as you could as a team but it wasn't as organised or structured as it is now."

Ian reveals that plans were also in place for a console conversion of *Walker*. "After launch I started doing an initial port to the Mega Drive. I didn't get very far, though. It was cancelled soon after I started and I left DMA Design soon after that to work at Iguana Entertainment UK. About the same time I started work on the *Walker* Mega Drive port Neill was hired to direct work on *Walker 2*. That project was ultimately shelved." Neill later followed Ian to Iguana, developing the SNES platformer *Zero The Kamikaze Squirrel* and working as a lead designer on the 1998 *South Park* videogame. Ian's credits at Iguana include the first two *Turok* titles, before making a move to Ion Storm in Texas where his projects included *Deus Ex: Invisible War* and *Thief: Deadly Shadows*. His recent developments include *Contra 4* and *Konductra* on the Nintendo DS. As for DMA Design, after producing the first two *GTA* games the company closed its Dundee office, moved to Edinburgh, and became Rockstar North. The rest, of course, is history. But we've yet to see any 40-foot mechs rampaging through Liberty City. And that's a pity, we say. *

» Shades of *R-Type* in the final boss perhaps?

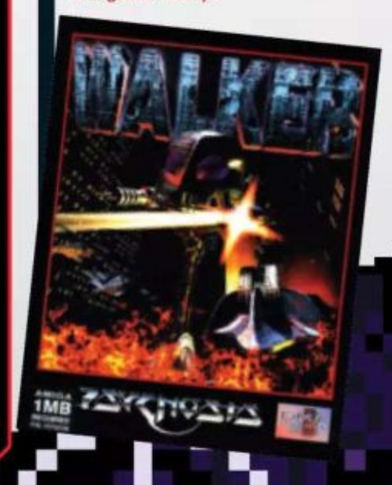
DEVELOPER HIGHLIGHTS

MENACE
SYSTEM: Amiga
YEAR: 1988

LEMMINGS (PICTURED)
SYSTEM: Amiga
YEAR: 1991

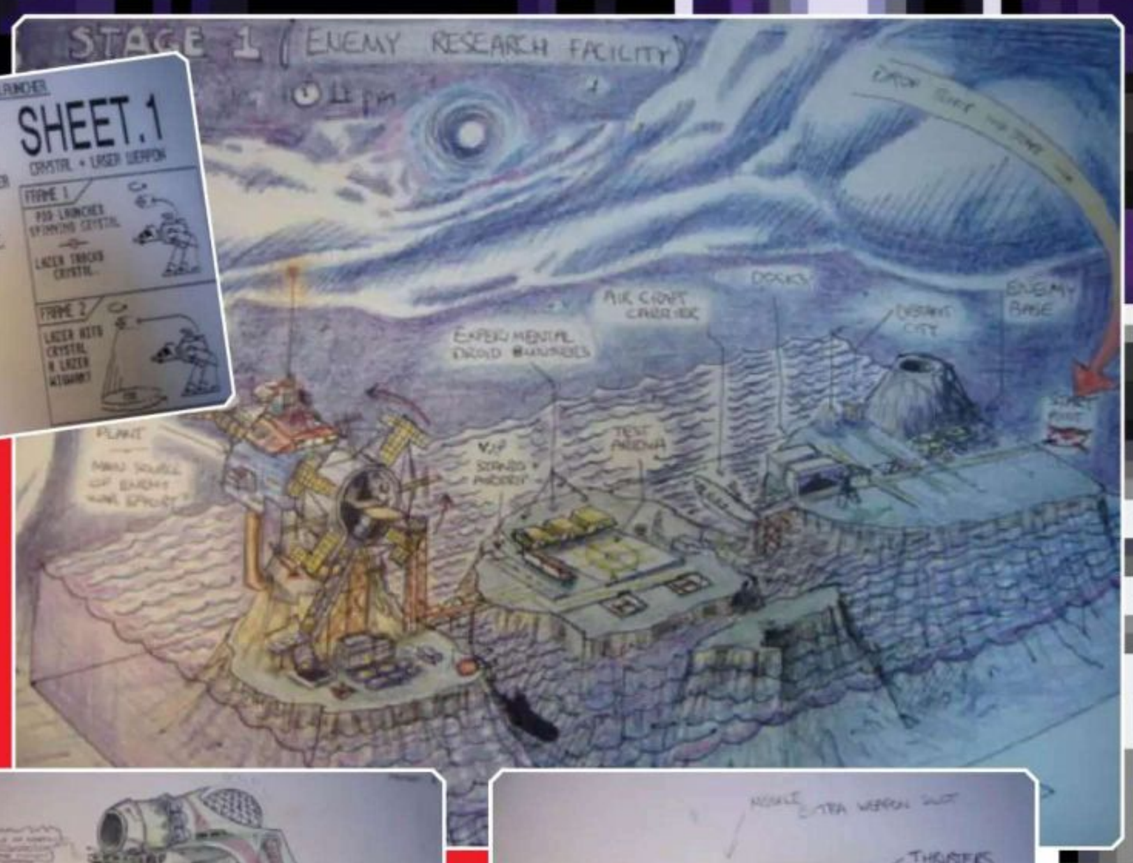
GRAND THEFT AUTO
SYSTEM: PC, PSone
YEAR: 1997

» *Walker*'s moody futuristic cover artwork set the tone for the game nicely.



WALKER 2

Shortly after *Walker* was completed Neill Glancy was recruited by DMA to work on a sequel, which sadly never saw commercial release. However Neill still has much of the original concept art, some of which we present here. "We mainly wanted to fix a lot of the shortcomings of the first game namely lack of weapon variety," Neill tells us. "In addition we planned to completely overhaul the visual quality to incorporate some research work I had done on the game. We were looking at the 3DO system because it used CD-ROMs and we wanted to stream the game's stage backgrounds off the disc. The sequel was planned to have a customisable Walker 'frame' and players would earn money from performing missions. As the player earned money they could upgrade their base facilities and capabilities. Enemies would have been far more competent and interesting to attack, and elaborate boss battles as well as a complex story was envisioned. Several new parallaxing technologies were also researched and we planned more movement between screen layers as well as a feature called the 'turntable battle system'. *Walker 2*'s design was fascinating, very ahead of its time and had many elements we see in modern games. When I left DMA to move to the States the game kind of came with me I suppose. I would still love to make it one day if someone has several million dollars to spare!"



Open feature

SCUMM ORIGINS

Some of the Amiga's greatest games made use of the SCUMM adventure system. Mike Bevan celebrates the popularity of the famous engine with Ron Gilbert, Tim Shafer, Aric 'Scumm Lord' Wilmunder and assorted LucasArts alumni

» *Labyrinth*, Lucasfilm Games' graphic adventure based on the Jim Henson movie, was a stepping stone towards SCUMM.

I remember when I was first building that engine, I never thought it would be used beyond *Maniac Mansion*, it was just a tool to get that game done," declares a bemused Ron Gilbert. "The fact that a lot of LucasArts adventures that followed used that engine, and then when I started Humongous Entertainment we licenced the SCUMM system and used that engine for all the kids games we built, and the fact it's still being used today is quite amazing to me."

"Considering how haphazardly put together and poorly programmed the whole thing was, that's more amazing!" quips Ron's *Monkey Island* collaborator Tim Schafer, who is sitting in on our call to Double Fine headquarters in San Francisco.

Jovial banter between longtime friends aside, it's an astonishing achievement. The little scripting language that Ron cobbled together for the Commodore 64 is still powering the *Monkey Island* special editions on multiple platforms from Xbox 360 to iPhone a quarter of a century on. Did the men behind SCUMM, an acronym for 'Script Creation Utility for *Maniac Mansion*', ever dare to dream that would happen?

"I'm not sure at what point we all became aware of the potential," says Chip Morningstar, the programmer that assisted Ron in SCUMM's inception. "We were just trying to get *Maniac Mansion* done in a timely fashion. The slowly dawning awareness of the consequences kind of just crept up on us. But of course it's entirely possible that Ron had visions of world domination from the very beginning, because that's just the kind of guy he is..."

"Ron had the important insight that in a lot of games, the stuff that requires really delicate, performance tuned programming – mainly graphics rendering – was stuff that you tried to get right once and then left alone because futzing with it was treacherous. Whereas the parts that were subject to a lot of revision throughout development – namely, the game logic – were not terribly performance sensitive and so could be implemented in an easy to program, easy to update, and easy to debug scripting language and not suffer any particular performance penalty. So Ron came to me with this insight, which seemed obviously right to me, and asked how hard it would be to write a compiler and I said, 'No problemo, I can do that.' And he specified the language and byte code scheme and I wrote him a compiler that translated from one to the other."

It's possible that Ron had visions of world domination from the very beginning...

"The language was more Ron and Chip's brainchild at the start," explains former LucasArts programmer Aric Wilmunder, who migrated the SCUMM system to the successful PC platform, "since I believe I was working on *Habitat* at the time. I was responsible for the *Habitat* animation system and walking code and a version was used in *Maniac* so that's how I first became involved."

"I played the *King's Quest* games right as I was starting out thinking of *Maniac Mansion*," recalls Ron, "and the thing that always bothered me was the parser because I didn't like to type, and it was really a matter of not wanting to type things and getting round that little game I called 'second guess the parser' where you knew the thing on the screen that you wanted to manipulate but you just couldn't guess what the programmer called it so you just kept guessing all these names... it just made more sense to me to just point

» Nurse Edna says hello in the original C64 version of *Maniac Mansion*. Now where did I put that hamster?

at an object and 'touch' it if you wanted to manipulate it."

"And he's a bad speller," laughs Tim. "Ron's personality is that he's often frustrated with the counter-intuitiveness of everyday interactions, at the ATM or in the supermarket or whatever, he'll be designing more streamlined systems for it. That's like a natural Ron tendency..."

"There was a little bit of work done with that with the *Labyrinth* game before SCUMM at Lucasfilm," Ron acknowledges. "I think that was the first 'dipping the toe' in that kind of water, although they still had a parser, and still did adventure stuff, but they didn't quite fully embrace the point-and-click adventure."

We ask if Ron can explain the basics behind SCUMM in terms that this **RG** writer can fathom. "SCUMM is broken into two categories," he obliges, "there's a programming language which you type in with an editor and compile with a compiler, and the other part is all the tools that we had to do animation and sounds, to find objects – virtually every tool was something we wrote ourselves with the exception of graphics editing – originally we used Deluxe Paint and later Photoshop."

"SPUTM was the only thing you had to port right?" asks Tim.

"Yes, SPUTM was the run-time engine," replies Ron.

"That was the program that the end-user ran that would initialise the graphics and sounds, read the files from the disk, and interpret the scripts and data in those files to run the game," adds Aric. "When we shipped a game we would rename the interpreter to Monkey.exe or Dig.exe, but during development this tool was called SPUTM, which stood for 'Scumm Presentation Utility (TM). The name wasn't really trademarked, but we wanted to name it after another bodily fluid."

"SCUMM was the tool that tokenised the scripts and merged all of the game assets together into the files that we shipped on the disk. The version of SCUMM that was used for *Maniac* probably shared 80% or more of the commands used in later games such as *Full Throttle*. Once

Talk to Green Tentacle

the language was developed, most of the key commands did not require modifications; 'Walk Bernard to clock' and 'Walk Ben to motorcycle' were essentially unchanged. Probably the most distinctive part of SCUMM was that it was multi-tasking. This meant that multiple scripts could effectively run simultaneously."

"I got a Computer Science degree from college," Tim says, "and I was programming in C language, then my first job was programming SCUMM and I completely forgot how to program in C, it kind of ruined me for programming! SCUMM takes pride in being an English readable language – you can look at it and read it and it will say 'Guybrush walk to window, say this line, walk over here, this is an object, here's a verb...' It goes out of its way not to have unnecessary brackets, strange symbols or weird naming conventions."

"Part of my goal when I first created it was for it to be a programming language that non-programmers could use," says Ron. "I don't know if the language ever fulfilled that ultimate goal but a lot of what Tim mentions was a result of that initial desire. I wonder if I'd known that the SCUMM system would become so popular and well-known should I have named it something different... although the fact that it was named the SCUMM system was probably part of the reason it did become so famous..."

Part of my goal was for it to be a programming language non-programmers could use

» SCUMM's portability meant that games like *Zak McKracken* was easily converted.

"The most important thing was that the rules for naming all the tools had be based on disgusting bodily fluids, of course," Tim reminds us. "If you let a bunch of programmers come up with their own names they'll come up with the worst ones possible!" Which explains how SPIT (a font editor), FLEM (a graphical room management tool), BYLE (an animation tool for digital 'actors') and others came into being.

"For a short time we had a tool that we called SMEGMA," Aric says. "One of the programmers had a child and told us that when babies are born, their first bowel movements consist of this. Well, he was mistaken."

"We thought that was a really great word and we had it as the name of the tool until we went and looked up the meaning," chuckles Ron. "And then very quickly it didn't become the name of the tool..."

"As you can probably imagine, standing near us in the lunch line was probably a bit unsettling as we talked about SCUMM, BYLE, MMUCUS, FLEM, et al," says Aric.

"The one thing I did on *Maniac Mansion*," divulges Tim, "the tiniest touch I had on it was that when we converted it to Nintendo all the objects were slightly mis-tagged so I had to go into every room and push the tags around. But it shows up on my Mobygames profile so whenever I'm introduced somewhere it's like 'Tim's first game was *Maniac Mansion*...'"

So seeing as Ron admits he created SCUMM solely for the purpose of getting *Maniac Mansion* done without an enormous headache, how did it come to wind up in so many other games? "That was really because of *Zak Mckracken*," explains Ron, "because David Fox was one of the programmers on *Maniac Mansion* and he wanted to go off and do his own game, and I think he just became so used to the SCUMM system, and he wanted to do an adventure game, and he liked the point-and-click stuff, so I think using the engine

for *Zak* was a natural evolution. I had to make a few changes because there were parts of SCUMM that were very hard-coded for *Maniac*, and I had to remove all that stuff. Once I did that the system became very generic, it wasn't about a single game any more; it was a generic tool that could be used for anything. It had broken out and everybody started looking at using it."

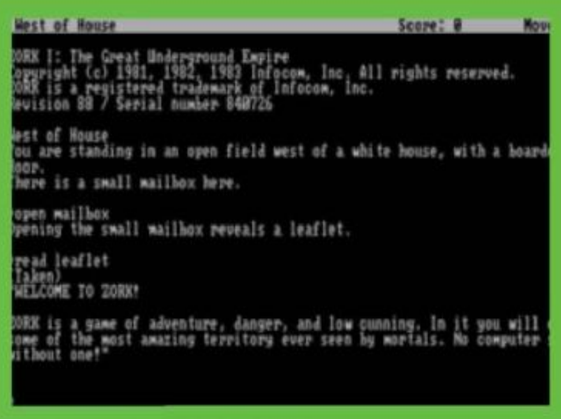
"One of the most powerful things about SCUMM," notes Tim, "was that we would do all this programming to make the gameplay work and then we wanted to do the Amiga and the Atari ST versions, all you had to re-write was SPUTM, and then the SCUMM files were all totally identical. I don't remember that being a common practice back then: the scripting language being separate from the game code."

"Well Infocom with *Zork* and their text adventures, had this engine called the Z-engine that they used to build their games," says Ron, "and I think Sierra had an engine too, but I think one of the things that Lucasfilm really did with the SCUMM engine early on was porting all these other platforms, and as Tim described, once you've ported SPUTM, games like *Maniac Mansion* and *Monkey Island* just ran so quickly on all of these platforms."

"Infocom's games were created using a massive DEC mainframe, kept in a refrigerated clean room guarded by priests in lab coats," says ex-Infocom

» *The Secret Of Monkey Island* is one of the most famous SCUMM games.

ADVENTURE GAME ENGINES – BEFORE AND AFTER SCUMM


West of House
Score: 0
ZORK I: The Great Underground Empire
Copyright (c) 1981, 1982, 1983 Infocom, Inc. All rights reserved.
ZORK is a registered trademark of Infocom, Inc.
Revision 88 / Serial number 840726
West of House
You are standing in an open field west of a white house, with a board
nearby.
There is a small mailbox here.
>open mailbox
Opening the small mailbox reveals a leaflet.
>read leaflet
Taken.
"WELCOME TO ZORK!
ZORK is a game of adventure, danger, and low cunning. In it you will
some of the most amazing territory ever seen by mortals. No computer
without one!"

ZIL (Z-MACHINE)

From Infocom's legendary text-based game *Zork*, ZIL (Zork Implementation Language) was conceived, with an advanced parser that recognised complex sentence structures, and Z-Machine, a 'virtual machine' allowing for compatibility on any home computer platform.

SAGA

An updated version of the original two-word text-only parser system in the early Scott Adams adventures, SAGA allowed simple disk-based graphics. An expanded version, SAGA+, with full sentence parsing, was used near the end of the company's run on several superhero games.

AGI (ADVENTURE GAME INTERPRETER)

Originally created for Sierra Online's *King's Quest*, the AGI engine allowed a text parser to be combined with a graphic background on which the player's animated character moved around. The engine and interface went on to be used in several Sierra games.

SCI

Used from *King's Quest IV* onwards, initially incorporating a graphic engine and parser, the second version of SCI integrated a fully mouse-driven interface, similar to that of the SCUMM adventures, and 256 colour graphics. The enhanced engine was used for several others such as *King's Quest V.*

VIRTUAL THEATRE

First seen in *Lure Of The Temptress*, Revolution Software's engine had a SCUMM-style mouse-driven interface and allowed 'virtual actors' in the game world to exhibit AI and move around independently. Improved versions of the engine were used for *Beneath A Steel Sky* and *Broken Sword I* & *II.*

GRIME

The LucasArts adventure engine that followed SCUMM, GrimE was one of the first to embrace the 3D perspective in the genre, requiring keyboard or joystick rather than mouse control. It was used for just two titles – the acclaimed *Grim Fandango* and the less well received *Escape From Monkey Island.*

THE CLASSIC LUCASARTS SCUMM ADVENTURES

LUCAS Arts

MANIAC MANSION (1987)

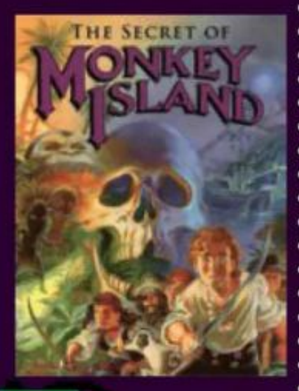
Originally conceived for the Commodore 64, *Maniac Mansion* is a heartwarmingly wacky broth of B-movie and comedy horror tropes, featuring the pioneering mechanic of controlling three separate characters throughout its storyline. Based loosely on the layout of the Skywalker Ranch, it's the game's bizarre antagonists, Dr Fred, Nurse Edna, Green and Purple Tentacle, and the aptly named Weird Ed, that create its most hilarious moments.

MONKEY ISLAND 2: LECHUCK'S REVENGE (1991)

Bigger, with added simians, *Monkey Island 2* is a master class in writing an adventure sequel, fleshing out the beloved characters of the original and providing our hero with more wonderfully humorous Caribbean islands to plunder with his rapier-like wit. And ultimately, Guybrush's quest for the 'fabulous treasure' of Big Whoop turns out to be something that not even the mightiest grog-swilling pirate could ever have expected...

THE SECRET OF MONKEY ISLAND (1990)

Monkey Island introduced us to the dubious charms of Guybrush Threepwood, insult sword-fighting ("How appropriate, you fight like a cow..."), and one of adventure gaming's best villains, the evil ghost pirate LeChuck. With a tight, very funny script by Ron Gilbert, Tim Schafer and Dave Grossman. 22 years on, it remains a perfectly formed adventure.



LOOM (1990)

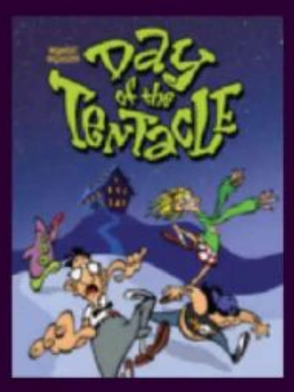
Loom's designer Brian Moriarty started out on Infocom text adventures like *Beyond Zork* and *Wishbringer*, and this ethereal fantasy title was equally innovative. The interface integrated a musical distaff that could be played to create various four-note tunes, each tied to a different spell in the game, used by protagonist Bobbin Threadbare.

INDIANA JONES AND THE FATE OF ATLANTIS (1992)

Hal Barwood's graphic adventure sees Indy attempting to foil a Nazi plan to unearth the ancient civilisation of Atlantis, with glamorous sidekick Sophia Hapgood in tow. With an epic storyline, excellent scripting, and an impressive array of locations from the jungles of Peru to ruins of ancient Greece, and the deserts of North Africa, it's still arguably the finest Indiana Jones game ever made.

DAY OF THE TENTACLE (1993)

The beautifully animated sequel to *Maniac Mansion* sees the return of Dr Fred and those diabolical Technicolor tentacles in a time-travelling romp through Colonial America. Various strange plot shenanigans, including Benjamin Franklin's 'helicopter', the Chron-o-John, kumquats, and cow tipping await. This is probably the weirdest of all the SCUMM adventures, in a good way.



SAM & MAX HIT THE ROAD (1993)

Springing from the warped imagination of artist Steve Purcell, *Sam & Max* follows the crime-fighting antics of a sardonic be-hatted canine and a three-foot hyper-manic bunny rabbit. Mixing film noir with a Looney Tunes aesthetic, art and animation-wise it's another fantastic achievement, and provides a cinematic gaming experience.

ZAK MCKRACKEN AND THE ALIEN MINDBENDERS (1988)

The second Lucas adventure to use the SCUMM engine, David Fox's tale of a hapless reporter on the trail of aliens improbably ties in transcendental meditation, two-headed squirrels, overpriced air travel and a goldfish called Sushi. *Zak* deliberately set out to break free of restrictive locations.

INDIANA JONES AND THE LAST CRUSADE (1989)

The only movie-licenced SCUMM adventure, as with the film *Last Crusade* concerns Indy's quest for the Holy Grail, taking in detours to Venice, Nazi-occupied castles and Zeppelin rides en route. The new IQ (Indy Quotient) system added replay value, awarding points for finding different ways to solve certain puzzles, or fighting enemies.

adventure creator Brain Moriarty, when, like Guybrush Threepwood, we ask about *Loom*. "All of the game designers shared the mainframe via a network of terminals. The language we used, ZIL (Zork Implementation Language) was similar to LISP. It was undoubtedly the most advanced game development environment on the planet. We actually had more computing power at our disposal than many third-world countries."

"SCUMM, on the other hand, had a more casual, homebrew feel. There were no refrigerated rooms or priests, and I never saw anyone in a lab coat, though you might occasionally glimpse a weirdo in a Darth Vader suit lurking outside the gate of Skywalker Ranch. The compiler and tools ran on ordinary PCs. The SCUMM scripting language was very simple, but capable of doing just about anything within the limitations of the target systems. *Loom*'s design was directly influenced by the capabilities of SCUMM. I studied the compiler and toolset and asked myself, "What sort of strange, magical experiences will this system support?"

We ask Ron how significant he thinks the SCUMM engine was for LucasArts. "I think it was really important," he admits. "When I started at Lucasfilm we couldn't make *Star Wars* games because they had licenced them to someone else, and since we really couldn't do the number one thing that the company was known for it really forced us to have to create new things. I think the SCUMM system was integral in that because it gave us this easy way to do these games that were predominantly about story, which was something

» Guybrush Threepwood's second adventure was a whopping one on the Amiga. It required a staggering 11 disks!

Lucasfilm was known for, and I think it attracted the sort of people who wanted to do those types of games to the company."

"We had this thing called SCUMM University when I first got to LucasArts," remembers Tim. "Every afternoon Ron would come up and tell us how to do one thing like 'Here's how you add a room to the game' or 'Here's how you add a character.' We had this *Sam & Max* art that Steve Purcell had made just for SCUMM U, which was Sam and Max's office, which I don't think ever saw the light of day. It had a few animation states – a static-y television set, rabbit ears made out of a coat hanger that could be in two different positions, and we'd go 'I'm gonna make the static on the TV animate' and then we'd spend all day doing that, and by the end of it we were pooling in art assets from *Indiana Jones*, and all the Scummlets started making their own crazy, weird improvisational SCUMM games set partially in the *Sam & Max* universe. I had a remote-control car in mine that would drive through a mouse hole in their office and then would come out of a filing cabinet in Nazi Germany,

All the Scummlets started making their own crazy, weird improvisational games

FULL THROTTLE (1995)

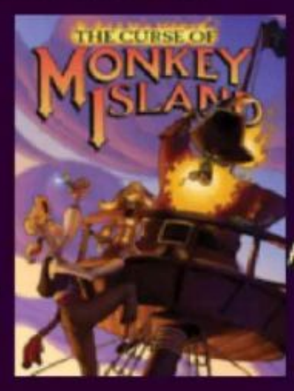
By the time of Tim Schafer's futuristic biker-themed adventure, the integration of the INSANE engine (originally created for *Rebel Assault*) into SCUMM meant that mixing real-time computer-generated animation with pre-rendered cutscenes became a possibility. *Full Throttle* embraced the movie style fully, as seen in its panoramic opening sequence, and with Mark Hamill playing the game's main antagonist.

THE DIG (1995)

Based on a story by Steven Spielberg, *The Dig* had the most troubled gestation of all of the LucasArts adventures, with a six-year development period during which it went through four different project leaders. Using a mix of traditional hand drawn graphics and pre-rendered sequences, the resulting game is an intriguing hotchpotch of science-fiction themes, as a Space Shuttle crew explore a mysterious asteroid, and discover more than they bargained for.

THE CURSE OF MONKEY ISLAND (1997)

The third *Monkey Island* features a revised cartoon art style and full voice acting, giving it a radically different feel to the previous two games. *Curse* has its fair share of genuinely funny moments, such as the encounter with Murray the talking skull, and the 'legend' of El Pollo Diablo, and while not quite matching the brilliance of its predecessors it's a quality instalment.



» *Sam & Max* has some of the finest hand-drawn art of the SCUMM games. The duo continues to terrorise hapless perps in Telltale Games' episodic series of adventures.

RON'S FAVOURITE SCUMM PUZZLE

"At the end of the *Indiana Jones And The Last Crusade* there's a scene where Indy has to step off a cliff, and all he's told in the lore from the Grail is that he just needs to have faith. In the movie he does this because there's some kind of quasi-camouflaged platform he lands on, and when we were doing the game we wanted to do something similar. The player just needed to click on the other side of the screen over the empty ledge, and if they did that the character would walk safely across. If they took too much time scanning around the screen with their cursor we decided they didn't have faith and when they'd walk off the ledge, they'd die. I always liked that puzzle because we were asking if players had faith in what we asked them to do."

although we probably shouldn't talk about that…"

"We were working with what we had," laughs Ron.

"Regarding Scummlet training, I think that one time it was at the Ranch and everyone was up on the third floor of the main house," remembers Aric. "George's offices were on the second floor so they had to be well behaved."

"*Monkey Island* was the first game where I felt I had once-and-for-all figured out what an adventure game should be," Ron admits. "*Maniac Mansion* was just a mess from a design stand-point and *Indiana Jones And The Last Crusade* was starting to get a bunch of stuff figured out, but when *Monkey Island* came around, that's when I wrote an article called 'Why Adventure Games Suck' that outlined a dozen rules of adventure game design and *Monkey Island* was a test to see if all those things I had written about were actually true. I think that it's a much cleaner, tidier game than the other ones."

"I loved the *Pirates Of The Caribbean* ride, and I always wanted to make a game that existed in that world – that weird Caribbean-type environment with all these fun-loving pirates. For me, adventure games have always started with the world and the characters just sort of come out of that." At this point Tim points out that naming the lead character 'Guy-brush' kind of confirms this.

"What can I say? I just don't care about the characters…" Ron grins.

We offer that many of the SCUMM games succeeded because of their humour, from the wacky, Chuck Jones/Tex Avery style of *Day Of The Tentacle* and *Sam & Max* to the wrier, more Pythonesque comedy of *Monkey Island*. "The humour in *Sam & Max* was a little zany," says Ron, "but I think the humour in *Monkey Island* was a more 'sophisticated' humour."

At this point Tim starts to laugh. "Like that bit with the guy training with the sword-fighting machine and the bucket…"

"I guess the humour was a little drier, a lot of throwaway lines – those were all text bits read in a deadpan way, and Guybrush was always a bit of a deadpan guy in my head, and whenever I hear a voiced version of Guybrush, people are always 'telling' the jokes a lot more than I would imagine would be happening, so *Monkey Island* for me was, I don't know if it was 'sophisticated', but we were not trying to sell the humour so much. I think humour is a good way for the game industry to reach audiences because I think it's a mainstream idea, more mainstream than hyper-violence."

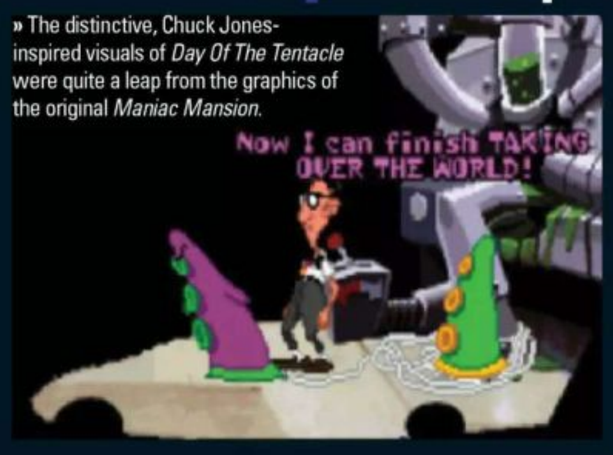
An interesting side note on SCUMM is the fact that it first introduced the term 'cutscene' to videogames. "The scenes that take place in the mansion, they were on timers, so when we decided to play the scene with Dr Fred we would literally just cut away from the game and play it, so that just became the shorthand, we called them 'cuts scenes' because they cut away from the game, and then there was a command in the SCUMM language that was called cutscene that handled all of the logistics – saving the game state, playing the cutscene and then restoring the game state when it was over. It was a bold point on the back of the *Maniac Mansion* box, people talked about them and that's how the word got connected and then grew into a more generic term."

"It's funny because it actually fell out of favour, like a time-driven cutscene, we decided we didn't want to do any more with the next game," says Tim.

"In *Monkey Island* we were tying cutscenes more into events that the player made happen by interacting with the world,

» *Maniac Mansion* on the Amiga massively improves upon the excellent C64 game.

With each new game we tried to push the boundaries and do things that hadn't been done before



» The distinctive, Chuck Jones-inspired visuals of *Day Of The Tentacle* were quite a leap from the graphics of the original *Maniac Mansion*.

» *Full Throttle* was the first SCUMM adventure to combine real-time animated graphics with pre-rendered video cutscenes.

and it just felt a little cleaner," says Ron. "We actually had a rule at Humungous Entertainment, which was no cutscene can last longer than ten seconds. We knew from watching kids play games that if you took control away from them for more than ten seconds they would just lose interest."

As SCUMM evolved, games like *Full Throttle* and *Curse Of Monkey Island* began to integrate full motion video, replacing the traditional in-game cutscenes seen previously. However *Curse* would be the final LucasArts adventure to use the SCUMM engine. "The main reason we didn't use SCUMM for *Grim Fandango* is that Ron and Aric had left and we really needed someone keeping up the engine side of SCUMM," explains Tim. "The best programmers at LucasArts were working on projects like *Jedi Knight*, which were 3D engines. Because of the game *Bioforge* I wanted to do something 3D using pre-rendered backgrounds and so we decided to do a new engine. It was really the programmers' decision to use a new scripting engine from the University of Rio called Lua, which BioWare had also used for its first couple of games, instead of doing a whole new scripting engine from scratch."

Grim Fandango would be one of LucasArts' last original point-and-click adventures, after which Tim moved on, founding Double Fine Productions and unleashing games like the splendid *Psychonauts* and *Brütal Legend* on the world. But the recent success of the *Double Fine Adventure* Kickstarter campaign, which raised a colossal $3.45 million to fund a traditional point-and-click style adventure, has brought the genre back into the spotlight. "I always maintained that the adventure game market did not fall off," he muses, "it just didn't grow as much as other parts of the industry. And that's the thing that Kickstarter does. It allows those people to get together and say 'Hey this might not be the thing that makes the maximum return on investment, but we still want it, so here's a way to pool our money together and make it happen.'"

"*Double Fine Adventure* is very much being made like a point-and-click adventure because it's backed by fans of the genre. When we had the choice of doing things like we did before or coming up with something new, I do feel a lot safer doing things the old way because I know the people that are paying for the game like those old games and they don't mind dialogue trees and cutscenes. That being said there's a lot to evolving adventure games, there's a lot of opportunity to getting games to new audiences that have never touched a computer before with devices like the iPad."

Ron's recently released game for Double Fine, a beautifully illustrated platform romp, *The Cave*, also harks back to his SCUMM adventure designing roots. "The Cave is obviously very influenced by classic adventure games," he reveals, "with the puzzle-solving and humour. I think it's very much lifting a lot from those old games – we don't do dialogue trees but there's this strange, slightly nonsensical world that it has that I like a lot."

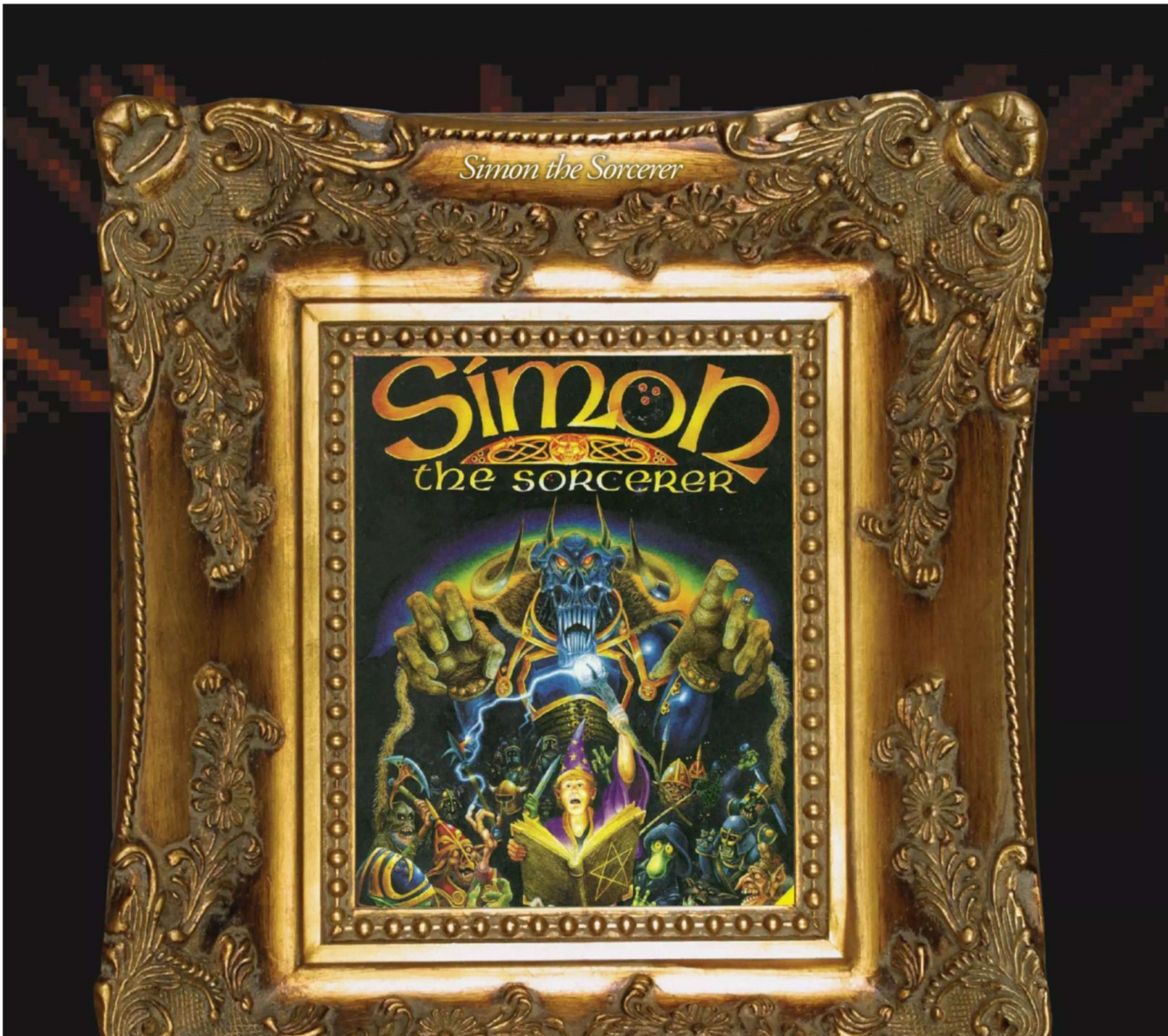
Long-time adventure fans may also spot a reference in the game's opening sequence that takes them back to the early days of Lucas adventures. Says Ron, "the number one reason that I wanted that beginning scene in *The Cave* to be that way is that is because it's the character selection screen from *Maniac Mansion*, and people do see that… that was on purpose."

» The PC talkie version of *Indiana Jones And The Fate Of Atlantis* shows the quality of Hal Barwood's script.

"I was always most excited and most proud of the most recent game we were working on," reflects Aric. "With each new game, we tried to push the boundaries and do things that had never been done before. I've always thought that if you aren't moving the art or the technology forward, why bother? There were some favourite moments, like the opening animation in *Day Of The Tentacle*, or the humour in *Sam & Max*, the music in *Full Throttle*, or being able to walk all three kids simultaneously in *Maniac Mansion*. Each accomplishment was very different, but like your children, they each hold a special place in your heart."

ScummVM

ScummVM is a freeware interpreter, originally designed specifically to run the vintage LucasArts SCUMM adventures on modern platforms. The interpreter has been expanded to be compatible with many other games, such as *Flight Of The Amazon Queen*, *Beneath A Steel Sky*, and many of Sierra's graphic adventures including the *King's Quest* and *Leisure Suit Larry* series. While Ron Gilbert has endorsed ScummVM as an important tool in keeping classic adventures games alive, LucasArts has always taken a more negative stance on the project. However it remains an invaluable tool for experiencing the SCUMM adventures on today's PCs as well as a myriad of other devices.



CLASSIC GAME

SIMON THE SORCERER

If you thought LucasArts held a creative monopoly on the Amiga's adventure games then think again. In 1994, a tiny, family driven soft-co showed the American giants a thing or two with a new point 'n' click game that excelled in all areas. It had greater graphics, superior sound and funnier one-liners than Monkey Island? You better believe it. Ashley Day takes an extended look at the enchanting Simon the Sorcerer

"FROM THE OPENING SCREEN SIMON THE SORCERER MADE IT ABUNDANTLY CLEAR THAT YOU WERE ABOUT TO PLAY A LOVINGLY CRAFTED ADVENTURE WITH A WITTY SCRIPT AND SUPERB VOICE ACTING"

In the early Nineties you couldn't swing a joypad in a games shop without hitting a graphic adventure game. The likes of LucasArts and Sierra churned them out almost quicker than gamers could complete them and there was little sign of the genre's eventual fall from grace. King of the adventure castle was, undoubtedly, *The Secret of Monkey Island*, a LucasArts game that combined mind bending puzzles with a side-splitting script and a cheeky central character. LucasArts made millions on the back of *Monkey Island's* success so it was no surprise when other adventure designers sought to mimic its unique style. Most imitators were unable to come close to replicating *Monkey Island's* appeal but one game was able to match the blockbuster and even surpass it in certain areas.

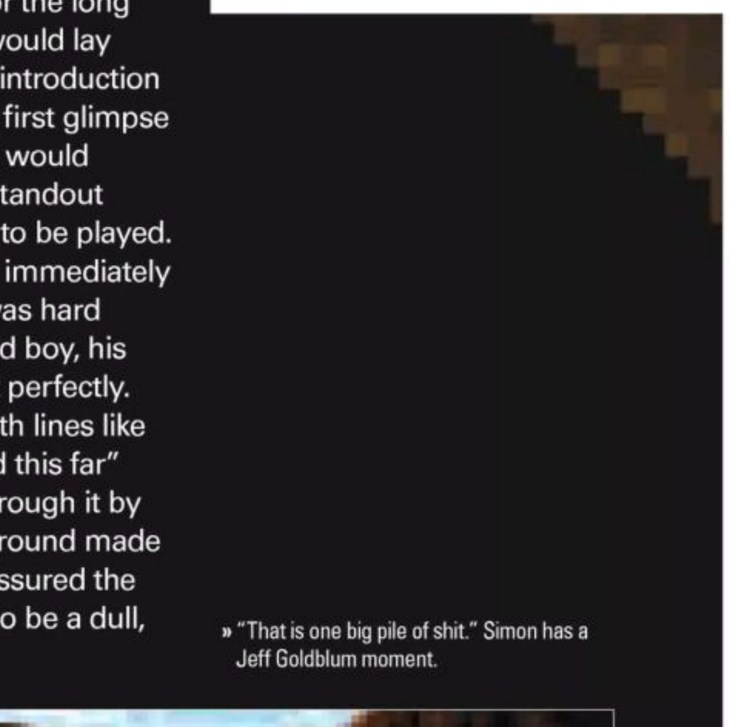
Simon the Sorcerer, one of only a handful of British adventure games that gave the big American titles a run for their money, was created and developed by Adventure Soft, a small family-based developer in the heart of Sutton Coldfield. Adventure Soft was born out of the ashes of Scott Adams' Adventure International company and at its core was the Woodroffe family, who handled almost every aspect the development process. Managing Director Mike Woodroffe led the programming team, his wife Tricia was Assistant Producer, son Simon wrote and designed the games, and little brother Jon play-tested them. Having cut their teeth on a number of 8-bit computer games and the Amiga's *Elvira*, series the Woodroffe's set out to make an adventure game that would compare favourably with the Lucasarts big hitters.

They achieved just that when, in 1993, *Simon the Sorcerer* was released to critical acclaim. Reviewers were enthralled by the remarkable background imagery, which was hand-drawn on paper then scanned and coloured using a computer, whilst players were enraptured by the Pratchett-esque humour and smart puzzles. *Simon the Sorcerer* was originally released on floppy disk for the Amiga and PC, but it is the Amiga CD version (released in 1994) that impresses the most thanks to its enhanced soundtrack and professional voice talent.

From the opening screen *Simon the Sorcerer* made it abundantly clear that you were about to play a lovingly crafted adventure with a witty script and superb voice acting. Upon popping the CD into the drive you were greeted with a quaint, ambling theme tune that drew you in and made you feel comfortable for the long hours of puzzle solving that would lay ahead of you. Next came the introduction that set the scene and gave a first glimpse at the astounding visuals that would go on to define the title as a standout adventure game that needed to be played. Chris Barrie's voice work was immediately impressive and, although it was hard to believe he was a 12-year old boy, his cynical tones suited the script perfectly. As the intro was peppered with lines like "I can't believe you've watched this far" and "I would have skipped through it by now", Barrie's comedy background made him ideal for the part and reassured the player that this wasn't going to be a dull, po-faced point 'n' click.

IN THE KNOW

- **PUBLISHER:** ADVENTURE SOFT
- **DEVELOPER:** IN-HOUSE
- **YEAR RELEASED:** 1993
- **GENRE:** POINT 'N' CLICK



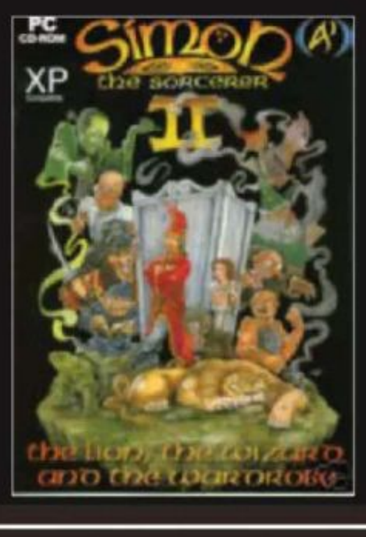
» "That is one big pile of shit." Simon has a Jeff Goldblum moment.

SIMON SAYS "MAKE A SEQUEL"

Simon the Sorcerer 2 made it's way onto the PC in 1995 with a belated Amiga version following in 2000. The most obvious change was the absence of Chris Barrie behind the microphone. Brian Bowles, who had contributed voice work to *Beneath a Steel Sky* the year before, took over and, although he was a more convincing 12 year old, his lines failed to deliver the sarcastic zest that Barrie had brought to the original. The quality of the script had also dropped a little; this version of Simon had traded in his wit and cynicism for simple nastiness and now only seemed capable of unsophisticated insults. Many original fans found this new Simon to be a thoroughly dislikable character and refused to take the sequel seriously.

There were other problems too, like the map navigation system that removed any sense of exploration from the game, but *Simon 2* had its fair share of good points too. The excellent standard of graphics had been improved upon tenfold with many backgrounds (and foregrounds this time) looking absolutely stunning. The brilliant puzzles returned, as did some of the favourite characters like the Swampling who had started a chain of restaurants called Muc Swampy's.

Despite its shortcomings, *Simon the Sorcerer 2* was a brilliant game that lavished the player with hours and hours of quality puzzling and hilarious misadventure. To overlook it would be to miss out on one of the best adventure sequels.



» He'd been in some tight spots before; but Simon was in real hot water now...

The main body of the game built on the excellent introduction and kept the quality flowing. Every single screen was hand-drawn by Paul Drummond's small artistic department and really showed off the Amiga's capabilities. Whether Simon was strolling through the forest or ordering a Wet Wizard at the inn, the environment was painstakingly drawn with hundreds of colours and detailed textures. Incidental animations, like the cantering deer of the forest, or the ducks in the village pond, brought Simon's world to life, and the computer controlled characters, who chatted between themselves when left alone, ensured that the game remained involving even when you were pondering the latest problem.

The great thing about those solutions is that they were always logical. The Lucasarts games had encouraged players to combine seemingly incompatible items and use them in unthinkable places but every one of Simon's puzzles had a believable solution that made perfect sense. The only time the game presented an unfair challenge was when you couldn't find the right item. The number of on-screen colours pushed the hardware to its limits and occasionally made some items the same colour as the background. This meant that if you thought you were missing an item you had to scan the entire background with the mouse pointer to see if there was anything hiding there. Aside from the colour issue the puzzles were well thought out and, despite their logical solutions, were highly imaginative. Like the script, the puzzles weren't short of humour either. The Dwarf mine could only be entered if Simon cut off a Dwarf's beard and wore it himself, and the local wizards (masquerading as farmers) would only admit to their true identity when told that the mouse pointer revealed them to be wizards. An adventure game lives or dies on its puzzles and Adventure Soft had created a set of conundrums that were, for the most part, just challenging enough to be satisfying, and humorous enough to not cheese you off when things got tough; they got the formula just right.

Forget the puzzles for a minute though. Forget the beautiful graphics and the music too. What really made *Simon the Sorcerer* special were the characters. Simon's quest threw him headlong into

THEY SAID:

"IF YOU'D LIKE A FUN ADVENTURE, BUT HAVE NEVER BEEN SUCCESSFUL WITH THEM IN THE PAST, THIS IS THE ONE FOR YOU"

COMMODORE USER AMIGA

» If only there was someone who could push that tree over...

the strangest situations and predicaments with the most unusual creatures, each of which was expertly scripted to squeeze out every last drop of humour that they had to offer. Years after the game's release, the parts that fans remember most fondly are the encounters with Simon Woodroffe's insane creations.

One of our particular favourites was the woodworm. Early in the adventure, Simon strolls past a tree stump in the forest only to hear a squeaky voice ask "Got a bit of wood on you mate?" Simon takes a look around, slightly perplexed by the disembodied voice then shrugs it off and continues on, but the voice addresses him again: "Just a bit of bolsa or plywood? We're not fussy." After realising that a family of woodworm and not the stump are talking to him, Simon finds himself drawn into a conversation on how humans are racist for not realising that woodworm can talk, and whether mahogany, beech or ebony is the tastiest wood.

Another fond favourite is the lonely Swampling that Simon discovers sulking in his lakeside hut. The droopy-faced swamp creature is celebrating his birthday but nobody has bothered to turn up for the party. So as soon as Simon appears at the door he naturally takes the opportunity to play the good host and, after unfolding his sob story, sits our hero down and treats him to lovely bowl of swamp stew. At this point Simon can choose to eat the stew, which quickly leads to a very messy floor, or he can insult the swampling and leave. Insult the poor little creature, however, and the game will begin to break a few hearts. The Swampling breaks down, his nose running, and proclaims that nobody likes his stew and that he's having a terrible birthday. We defy any player not to feel incredibly guilty at this point and sit down for seconds.

Both of these memorable characters, as well as the plethora of fairy tale inspired folk that Simon meets along the way are effective because of the ground-breaking voice acting that Adventure Soft included on the CD. Chris Barrie is a great addition to the game and was rightfully hailed as such in 1994 but the supporting cast deserves just as much credit. Many of the voice actors put in multiple performances but there's no way to tell as each is completely individual and well suited to the style and animation of their own character. Most are amusing, if not hilarious, whilst others go the extra distance to actually tug at the heartstrings of the player. The Swampling sequence, for example, would not be half as traumatic to take part in were it not for the emotional depth that Jon Haines brought to the character with his sniffling, sorrowful tones.

Even now *Simon the Sorcerer* is an outstanding game that sets a shining example to all other adventure games. Whilst many additions to the genre have impressive 3D graphics they cannot compete with the beauty of Simon's hand drawn 2D backgrounds. They don't have the range of colour, they don't have the extraordinary depth of field and they lack the detail. To make a 3D game that visually stood up to the standards of Simon's era would take a budget of several million pounds, which most publishers will not spare for a niche title. The puzzles stand out from modern efforts too, recent adventures have cut back on the number of item based puzzles, whilst some, like Fahrenheit, have done away with the inventory altogether. Simon's expansive inventory made it possible to tackle a number of puzzles in a non-linear order, a quality that is severely lacking today. The voice acting, which we've already championed at great length, is still worthy of note. You can still walk into your local video game shop and pick up a release with shoddy, clichéd voice acting but Adventure Soft got it right first time with great acting and an equally strong script.

Most of all though *Simon the Sorcerer* still feels fresh and entertaining today because it has soul, something rarely seen in more recent adventure games. Adventure Soft's "Mom & Pop" work ethic ensured that the Woodroffe family poured their hearts into the game and it shows. *Simon the Sorcerer* is a true British gem that fully deserves to stand shoulder to shoulder with the LucasArts classics and to reach a wider audience than its strong cult status has achieved.

» This Troll didn't bother to eat the billy goats. He took industrial action instead.

SIMON'S SEQUELS

Simon the Sorcerer 3D was originally completed in 2000 but evaded release for two years due to a lack of publisher interest, and its easy to see why. Even by the standards of five years ago the graphics were very blocky and compared with the high watermark set by the previous games they looked sloppy and unprofessional.

There were some decent puzzles and a very funny story in *Simon 3D* but they were completely undermined by the shoddy graphics, clumsy controls and the return of Brian Bowles' offensive characterisation. That wasn't the end to the series however, as *Simon The Sorcerer 4: Chaos Happens* was released in 2007. It's an improvement over *Simon 3D*, but lacks the wit and clever puzzles of the earlier 2D games. A fifth game was released in 2009, while *Simon The Sorcerer: Between Worlds* is currently in production and may appear as a Kickstarter in future months.

DEVELOPER HIGHLIGHTS

GREMLINS (PICTURED)
VARIOUS [1985]

SIMON THE SORCERER II
AMIGA/PC [1995]

THE FEEBLE FILES
AMIGA/PC [1997]

THE MAKING OF...

WORMS

Once touted as a "Matthew Smith for the PlayStation generation" Andy Davidson briefly worked in the games industry before disappearing from the face of the earth. Never one to let a slight disappearance get in the way, Ashley Day tracks down the last great bedroom programmer to chat about his smash Amiga hit

The story of *Worms* is a 'rags to riches' tale that was common in the Eighties but had become a true rarity with the advent of the 16-bit era. So when *Worms* became a worldwide phenomenon, sellling over five million copies, many gamers were surprised to find it had almost single-handedly been created by one man and his Amiga.

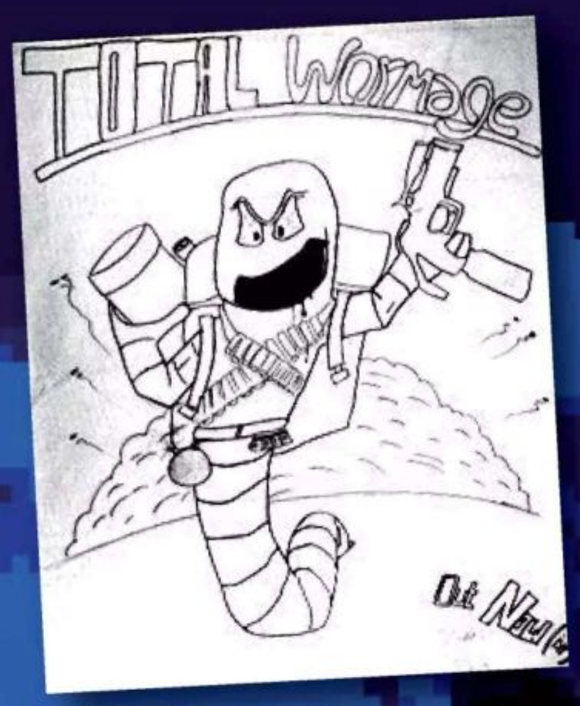
Unaware of what the future held for him, Andy Davidson began work on *Worms* for his own amusement in 1990, some five years before the game's commercial release. "It started life as a version of the old simple tank games that had been around since the 8-bit days", explains Andy. "It was called *Artillery* then and ran on the cutting-edge hardware that was a Casio graph-plotting calculator! It was just an experiment to see if I could get it to do something a bit more interesting than drawing a graph." Moving *Artillery* onto the Amiga meant that Andy was able to expand on the concept. "Giving the player the freedom to move around the landscape, and adding teams, changed the gameplay quite substantially and introduced new levels of strategy to it. That set me thinking about what other elements I could introduce, and the game just snowballed from there."

With the core gameplay in place *Artillery* needed a graphical style that would set it apart from its spiritual ancestors. "I wanted to try and get the same quality of animation and humour into the characters as had been managed in *Lemmings*," recaqlls Andy. "It had always impressed me what could be done with so few pixels. I'm a bit of a pixel-art junkie!" After a few experiments in Deluxe Paint, Andy settled on worms as the characters for the game. "Back then they were just about the only type of creature that hadn't been in a game. This was pre-*Earthworm Jim* of course. I wanted something more interesting than tanks or soldiers and they also suited the small size required as I was going to have up to 16 of them in play. The public also had a right to know about the more violent side of a worm's nature, which had so far gone unreported by the media in general."

» Your annelids can't swim, but they can drown.

» Weapon drops granted all sorts of fun bonuses.

THE MAKING OF: WORMS



» A mock advertisement for *Total Wormage*, drawn by Lewis Bray, a friend of Andy.

» This early animation sheet shows just how much work Andy personally put into the whole design.

» You'd look unhappy too if a worm blew your arm off.

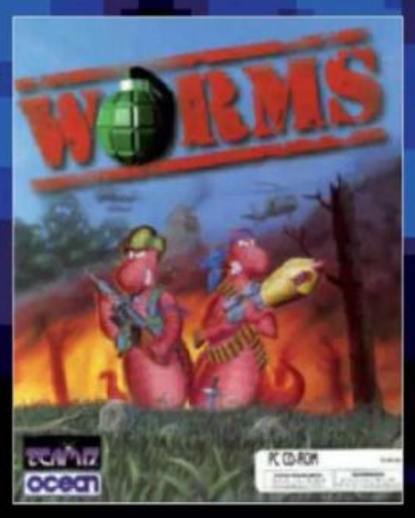
With the introduction of invertebrates into the game, Andy renamed it *Total Wormage* and kept adding new gameplay elements whilst sharing the work-in-progress version with his college friends. "The aim was to create something where every game was different. Hence the importance of the random landscape generator. I think this is one of the factors that set it apart from most commercial games; it was never intended to have an end. I also tried to make it more of a social game than most. I wanted to actively encourage people to take the piss out of each other, and to wind-up their opponents. It was when my form teacher banned it, because people were skipping lessons to play it, that I actually thought about trying to get it published, which was my dream. Once something gets banned you know that you might be onto something…"

As *Total Wormage* became increasingly popular with Amiga owners in Bournemouth, Andy realised it had commercial potential and posted a disk to *Amiga Format*, as it was running a game design competition. Sadly, it was ignored by the judges. The ambitious young coder must have been devastated. "It was a bit gutting at the time", recalls Andy, "Not because *Total Wormage* didn't win, but mainly because it seemed to have gone completely unnoticed. Although the side effect of this was it made me go up to the ECTS tradeshow in London in September 1994 as one last attempt at getting it noticed. I really wasn't expecting anything to come of it though, especially after what had happened with the competition. I booted it up on Team 17's stand saying 'You're probably not going to like this, it's a bit weird'".

Having already made a game featuring a Lucozade-drinking frog, Team 17 were comfortable with weird concepts and loved *Total Wormage* so much that it signed it up on the spot. Studio founder, Martyn Brown, originally envisaged *Worms* as a budget title but this idea was soon scrapped once the team realised the game's potential. "*Total Wormage* was complete enough already that it was played to death in-house, and was taken round the different magazines straight away. It was their reaction to it, which included not turning the power off in the building so the Amiga could be left on after Alan and Steve took the disks back to Team 17, that decided it was worth a full-price release." Andy soon relocated to Team 17's Wakefield HQ and began refining *Total Wormage*. "It was about 75% done when I showed it to Team 17. There was still a list of things I had left to add to it, such as airstrikes and cluster bombs, but the game was pretty much there. Even down to the speech. I was left to do what I wanted with the Amiga version while Team 17 handled the ports, so I developed it still further, introducing new things such as the sheep and custom levels." With the help of Team 17, Andy was able to add improvements that would not have been

IN THE KNOW

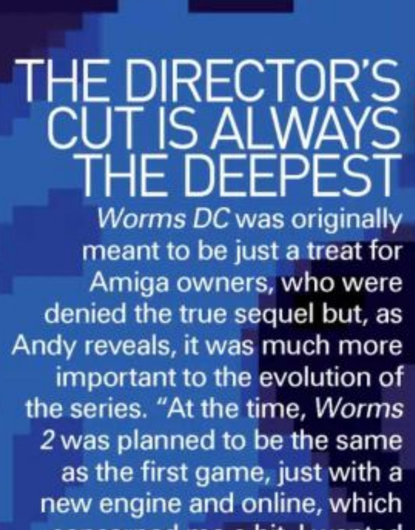
- **PUBLISHER:** OCEAN
- **DEVELOPER:** TEAM 17
- **RELEASED:** 1995
- **GENRE:** STRATEGY



"THE PUBLIC HAD A RIGHT TO KNOW ABOUT THE VIOLENT SIDE OF A WORM'S NATURE"

THE DIRECTOR'S CUT IS ALWAYS THE DEEPEST

Worms DC was originally meant to be just a treat for Amiga owners, who were denied the true sequel but, as Andy reveals, it was much more important to the evolution of the series. "At the time, *Worms 2* was planned to be the same as the first game, just with a new engine and online, which concerned me a bit. I wanted to make sure it had significant gameplay additions to make it a worthy sequel. I actually funded most of the development of *Worms DC* myself as a chance to try out new ideas. This formed the basis of *Worms 2*, and introduced the new weapons such as the Concrete Donkey, and the ability to draw your own levels inside the game, amongst other things". Not all of *Worms DC*'s changes made it into *Worms 2*, however, and the very rare game is now considered the superior title.



» Oh Yes More Worms was a shareware CD containing 1000 custom landscapes.

» While the Blow Torch was a great way of hiding from potential gunfire, it made it much harder to retaliate.

possible alone. We asked him which he found most invaluable. "Proper background graphics for a start. Rico Holmes' trees were a damn sight better than mine! The ambient background and title music that Bjorn Lynne did was also exactly what I'd wanted, but not something I could have done myself. Paul Kilburn's superior worm names were also greatly respected."

Team 17's contribution to development certainly added a more professional sheen to the final product, but part of *Worms*' charm was the personal imprint that Andy made on the game. Two of the most unusual elements of *Worms* were added independently of Team 17 and can now be considered pure Davidson in origin.

"The Concrete Donkey was born out of a pub conversation, when I was recalling how as a kid I thought my parents had covered a donkey in concrete and put it on display in the front garden. They claimed it was a common old garden ornament, I wasn't so sure though. So whenever they weren't around I chipped away at it with a stone to see if I could find fur underneath, and therefore prove it was once a real donkey! It seemed only right after that to immortalise it in the game." The Concrete Donkey has become a cult figure amongst *Worms* fans, just as the Sheep easily became the most popular weapon. "The sheep was just something I was messing around with in Deluxe Paint and decided that it had to go in the game somehow, so why not as a weapon? It was the first non-conventional weapon I put in, so that was a chance to try something different. I gave it a set of rules to follow, such as jumping holes and turning round if it got stuck; one of my mates, Ben Wilson, supplied the sound-effect, and the rest is history."

If Andy's personal touch added his unmistakable signature to *Worms* then the wealth of customisation options allowed each player to do the same with their own copies. "I wanted to add to the game's replay value by letting people change things in the game, from worm names to weapon amounts", recalls Andy when asked about the Amiga version's ability to use Deluxe Paint

"WORMS WAS ORIGINALLY CALLED ARTILLERY AND RAN ON THE CUTTING-EDGE HARDWARE THAT WAS A CASIO GRAPH-PLOTTING CALCULATOR!"

DEVELOPER HIGHLIGHTS

ALIEN BREED
SYSTEMS: AMIGA 500
YEAR: 1991

PROJECT-X (PICTURED)
SYSTEMS: AMIGA 500, CD32, PC
YEAR: 1992

SUPERFROG
AMIGA 500, CD32, PC
YEAR: 1993

» In *Worms* you could blow up whatever took your fancy.

» Three of these five worms are staff members, but which ones?

WORMS
GOING CHEAP
£12.99
CHEEP!*?
CHEEP!*?
"It's wonderful to take part in and even better, to win - buy it today - you certainly won't regret it."
CU AMIGA 94%
"If I was to make a must-have recommendation for Christmas, WORMS is it!"
AMIGA

» A "comical" advert for *Worms*' budget re-release on the Amiga 500.

» What other game allows you to kill creatures named after Weathermen? Answers on a postcard…

"I BOOTED IT UP ON TEAM17'S STAND SAYING 'YOU'RE PROBABLY NOT GOING TO LIKE THIS, IT'S A BIT WEIRD'"

images as backgrounds, "One day when I was doing some screenshots for the game, I thought about reversing the process and importing a ready-made landscape into the game. And then it suddenly hit me, why does it have to be a landscape? So soon I had worms blowing chunks out of the Team 17 logo and Madonna's head. This went down very well at ECTS that year so I decided to leave the ability in. It was great to see so many people make use of that, and upload their levels onto the Internet."

By 1995 *Worms*' five-year gestation was over and it was ready for public consumption. Though the original *Total Wormage* had become a cult hit in Bournemouth, nobody predicted just how popular the final game would be. *Worms* received rave reviews, was converted to ten other platforms (including an aborted *Virtual Boy* port) and accumulated sales in excess of five million units. Having left Team 17 after the release of *Worms Armageddon*, Andy, like an estranged parent, has watched his original concept evolve without his own input. "Obviously the big change has been *Worms 3D*. This was something I'd always argued against. *Worms* was built around being a 2D game and all the game mechanics are designed around that. To just take the game and put it in 3D ends up breaking a lot of those mechanics. I just see it as a bit pointless. I'd rather start again from scratch and build a 3D game with the same qualities as *Worms*, rather than try and recreate *Worms* itself." As for the original Amiga game, Andy is just as proud now as he was 19 years ago. "When you are that close to something, you never know for sure how other people will take to it. Hearing stories of people staying up night after night playing it with their mates at uni was great, because that's what the game had been designed for in the first place. I'm just glad they liked it."

OTHER GAMES IN THE SERIES:

Worms: The Director's Cut, Worms 2, Worms Armageddon, Worms Pinball, Worms World Party, Worms Blast, Worms 3D, Worms Forts: Under Siege, Worms Golf, Worms 4 Mayhem, Worms: Open Warfare, Worms Open Warfare 2, Worms: A Space Oddity, Worms 2: Armageddon, Worms: Reloaded, Worms: Battle Islands, Worms: Ultimate Mayhem, Worms: Crazy Golf, Worms: Revolution, Worms For Facebook, Worms 3, Worms: Clan Wars, Worms: Battlegrounds

NO 1 IN TEAM 17

Following the success of *Worms*, the gaming community eagerly awaited Andy's next concept but after a couple of sequels it became apparent that it wasn't to be and he mysteriously left Team 17, never to work in the games industry again. "I wanted to take risks and ensure any sequel offered something significant over it's predecessors. One of the things I'd wanted to try was giving it a proper real-time one-player game. This was supposed to be part of *Worms Armageddon* but we were never given the go-ahead to do a prototype to see how well it would have worked. I'd seen so many games I'd loved in the past devalued by sequels for the sake of sequels, that I didn't want that happening here. However it seemed like this was going to be the direction the series would go in from there. I'd been working on ideas for a completely different game but I wasn't given the go-ahead to develop that further either. So it was at that point that I decided to leave. Walking away from it all was one of the hardest decisions I've had to make but I just wasn't achieving what I wanted there."

» Andy doesn't have any involvement with the *Worms* series now, but his legacy lives on.

Alien Breed: Special Edition '92

» RETROREVIVAL

ALIENS AND TENSE BLASTING ACTION MAKE IT A BREED APART

» AMIGA » TEAM 17 » 1991

Once upon a time I traded in a SNES collection of around 50 Japanese games for an Amiga 1200. It remains one of the biggest mistakes of my gaming life. I'd been entranced by the likes of *The Eye Of The Beholder* and *Indiana Jones And The Fate Of Atlantis*, crucially forgetting that two of my favourite types of games, shmups and arcade offerings, weren't as well represented on the Amiga systems.

Thank goodness then for Team 17's *Alien Breed*. With its impressive visuals and atmospheric soundtrack, it reminded me of all the console and arcade games I used to enjoy on my SNES. It was a fantastic price to boot. I can remember almost wincing in pain when I handed over £70 for an import copy of *Super Star Wars*, so being able to pick up something as slick as *Alien Breed* for under a tenner was a fantastic feeling.

Playing it was just as enjoyable an experience thanks to Team 17 channelling the spirit of both *Gauntlet* and *Aliens* to create a tense and oppressive blaster, particularly when playing with a friend. Yes, the maps could be a pain to navigate and you'd often run out of keys before you could access specific areas, but there was something about Team 17's game that always dragged you back for one more go.

Even today there's something immensely satisfying about shooting your way through a sea of xenomorphs, and the metallic Bitmap Bros-styled visuals still hold up incredibly well. The game is admittedly simple in its execution – find exit, shoot aliens, pick up objects – but its quick pace and fun firefights still manage to entertain.

Alien Breed may have riffed heavily off other games – a Team 17 trademark – but it proved that Commodore's machine was more than capable of giving the consoles a good run for their money. I may have regretted losing that Super Nintendo, but the discovery of Team 17's game at least made the experience bittersweet. ✱

BAY 3

AMIGA 500 The Collector's Guide

Commodore's Amiga 500 is perfect for collectors as it features an array of stunning games across a variety of different genres. If the previous pages have given you the collecting bug then don't miss the following essential guide, which is full of the most interesting games and peripherals for the 16-bit marvel

AMIGA

» **Manufacturer:** Commodore » **Models:** Amiga 500, Amiga 500+ » **Launched:** 1987 » **Country of origin:** United States

500

AMIGA 500 The Collector's Guide

» An example of the Amiga 500's distinctive looking box art. Later packs focused on games.

» The mouse proved to be just as good at playing games as it was navigating spread sheets.

» Team17 did a lot of games that were very similar to other popular titles. This is obviously a *Street Fighter II* clone.

Why it's collectable

Following up on a machine as commercially popular as the Commodore 64 was never going to be an easy task, but few would argue that the Amiga wasn't a worthy successor. 1987's iconic Amiga 500 would secure the line's status with some of the finest 16-bit games of the era, making it ideal for collecting, while thousands of kids discovered that the computer bought to help with their homework was more than capable of competing with rival platforms of the time.

The Amiga 500's custom chipset was the reason for its immense power; a selection of co-processors handled tasks such as audio and video, leaving the main CPU free for other functions. The Amiga was also able to play back sound samples, making it a popular choice for coding demos and bedroom music makers and giving it an aural edge over its rivals. Like many home computers of the time, Commodore's machine wasn't explicitly intended to play games.

The Amiga's predecessor – 1985's Amiga 1000 – was aimed at business types and was supposed to compete with Apple's Macintosh, but like so many computers of the period, it ran games as well. However, due to the popularity of Atari's ST, many of the titles produced for the 1000 were straight ports of existing ST titles, which meant they failed to harness the power of the cutting-edge hardware within the system. To make matters worse, Commodore fumbled the promotion of the computer and poor sales forced a rethink – resulting in the birth of the 500 – a "cut-price" Amiga 1000 and the system which would ultimately shape the future of the brand.

Due to the dominance of IBM-compatible PCs and Apple Macs in North America, the Amiga 500 was not a massive success in that region. It was Europe where it achieved its greatest commercial triumph, thanks largely to the fact that consumers were keen to upgrade from their outdated 8-bit machines, such as the ZX Spectrum and C64. The Amiga 500 fought off stiff competition from its rival the Atari STE, and as the Nineties dawned, scored a number of high-profile exclusives like *The Chaos Engine*, which would prove so successful they would be subsequently converted to the emerging Japanese home consoles. They remain popular with collectors to this day.

Although the Amiga 500 was clearly a more mass-market machine than the Amiga 1000, Commodore was still reluctant to promote it as a gaming platform. However, in 1989 saw a price drop (£499 to £399) and the release of the all-important *Batman Pack*, which would enable the system to shift a respectable one million units in the UK that year. More game-focused hardware bundles followed (and are now highly collectible) making it clear that the Amiga 500 was just as serious a gaming platform as its console rivals.

The Amiga 500 was ultimately responsible for fostering the talents of studios such as Bullfrog, Team17, Sensible Software, DMA Design, Factor 5, The Bitmap Brothers and Psygnosis. Titles such as *Speedball 2*, *Populous*, *Sensible Soccer*, *Cannon Fodder*, *Turrican*, *Lemmings* and *Worms* all found initial

» The Amiga 500 had plenty of magazine support during its life time, ranging from *Amiga Power* to *Commodore User*.

» Amiga games often came in huge boxes. They look lovely, but can make storage an issue for bigger collections.

» The Amiga 500 used floppy disks. Many games would often require multiple disks, so check for missing ones when buying.

Did you know?

■ If you're serious about collecting for the Amiga 500 then we suggest you consider aiming for a complete Team 17 collection. The developer was extremely prolific on Commodore's machine, releasing a lot of high quality games like *Super Frog*, *Alien Breed* and the massively succesful *Worms*, often in distinctive, recognisable packaging. Ignoring AGA variants there are just under 20 games to collect, making it relatively easy to amass. If you want an even easier collection to seek out then we'd recommend The Bitmap Brothers, as all its games are relatively high quality and not too costly.

success on Commodore's computer before becoming international hits in their own right. It's this rich variety of titles – many of which are superior to the versions made for the Atari ST and PC – which makes the Amiga an appealing target for modern-day collectors. Like the Spectrum before it, the Amiga created an entire generation of bedroom coders, and as a result a sizeable "demoscene" grew up around the system.

Unfortunately, with such coding brilliance came a plague of piracy. The process of cracking games so they could be distributed on blank floppy disks was commonplace, and there wasn't a playground in the UK that didn't witness the sight of schoolkids exchanging disks with the very latest titles on. The volume of pirated software predictably impacted on genuine software sales, something which contributed to the Amiga's downfall in the early Nineties as developers and publishers migrated to platforms that were less susceptible to the problem.

By the time 1992 rolled around, the Amiga 600 and 1200 hit the market, but neither could replicate the success of the 500 and the Amiga brand started to lose ground to dedicated games consoles. The dismal performance of the Amiga CD32 made matters worse (making it collectible in its own right) and in 1994 Commodore filed for bankruptcy.

Throughout its lifespan the entire Amiga family saw approximately 12,000 different games, making the process of amassing a "complete" collection a daunting and almost impossible task. Even so, the average price of a boxed Amiga 500 game is comparatively much less than most of its direct contemporaries; you can pick up many titles for a few quid on eBay. There are notable exceptions, however; the infamous *Great Giana Sisters* was voluntarily withdrawn from sale by its publisher following consultation with Nintendo, who pointed out that it was a shameless clone of its *Super Mario Bros.* title. Mindscape's *Moonstone* is another rare release, its desirability driven by the fact that it was placed on the Bundesprüfstelle für jugendgefährdende Medien (Federal Department for Media Harmful to Young Persons) in Germany due to its intense depictions of blood and gore. The game has been known to fetch high prices in complete form.

Just a little further down the scale of rarity you'll find the big-box versions of many classic Psygnosis titles with their extra components, including all three *Shadow Of The Beast* entries. Cinemaware's Amiga lineage is also collectable, thanks to its lush cover art and the highly-regarded nature of the games themselves – *It Came From The Desert* and *Defender Of The Crown* are cult classics, even by today's standards. Elsewhere, limited-run curiosities such as the anime-themed puzzler *Gem'X* and the complete version of *Beneath A Steel Sky* fetch high prices.

The task of collecting all of the Amiga 500's best games is not one to be taken lightly, but you can pick up a working system and a selection of key titles for a modest amount of cash. You'll need to consider the volatile nature of floppy discs, but if you're serious about amassing a collection of classic games across a variety of genres, the Amiga 500 is a perfect choice.

THE PERIPHERALS

Quickjoy Jet Fighter

■ Ever wanted to feel like you're in the Tom Cruise flick *Top Gun*? Then this is the controller for you. As the name suggests, the Jet Fighter mimics the stick from a multi-million dollar combat aircraft.

Konix Speedking

■ One of the more usual sticks to see the light of day during the 16-bit era, the Speedking rests in the palm of your hand with the buttons on the underside. Despite its odd appearance it has plenty of fans, even today.

Hori Fighting Stick

■ You might assume that Hori's fighting-grade sticks are a recent invention, but the Japanese company was producing controllers way back in the 16-bit era, too. A solid controller for your Amiga action adventures.

Cheetah Annihilator

■ The *Annihilator* is a common sight even today, thanks to the fact that it sold plenty of units back in the day. While it's not quite as refined as some of its rivals, it provides accurate control and can withstand plenty of punishment.

Terminator head

■ Proof that some companies will stop at nothing once they've secured an expensive movie licence, this stick might look impressive, but it's incredibly uncomfortable to use. A collector's item, we're afraid, and little more.

Essential Joysticks

The Amiga may have become famous thanks to its dazzling selection of games, but it's important to remember that it was sold first and foremost as a computer, aimed at business types rather than hardcore gamers. As a result, early Amiga models didn't come with any kind of gaming controller – which meant that a whole host of third-party sticks appeared, each trying to offer something different to the rest.

In fact, it could be said that some of the sticks available for the Amiga possibly went a little too far in their efforts to stand out, using popular figures from comics and movies to give them that little something extra. Characters such as Batman and the Terminator were both called upon when it came to crafting a unique stick, although once the novelty of waggling the Dark Knight around had worn off, you were usually left with a very uncomfortable hunk of hardware.

It goes without saying that a decent controller is an essential item in the armoury of any self-respecting Amiga fan, and picking the right one is often a matter of personal preference than anything else. Manufacturers such as Cheetah, Konix, Powerplay, Sigma and Quickshot all produced sticks aimed at home computer gamers, but the Super Pro Zip Stick and Kempston Competition Pro are regarded by many fans as the best of the best.

Both are highly responsive, boast large buttons and showcase comfortable designs, making them a must for any serious collector. The Competition Pro is such an esteemed controller that it has recently gone back into production despite the fact that original creator Kempston no longer exists – Individual Computers and Speedlink handled the manufacturing process this time around.

Because the Amiga uses the same 9-pin interface as the Atari 2600, Sega Master System and Sega Mega Drive, it's also possible to use controllers intended for those formats – although you need to remember that only one fire button is supported, so you won't be able to use the additional keys on the Mega Drive pad.

...AND THE REST

01. External CD Drive

■ Thanks to the legacy of the CDTV, the Amiga range was one of the first platforms to embrace the power of the CD-ROM storage medium – sadly, it was a little too early to the party. Even so, an external CD drive is a handy item for any serious Amiga collector – just check that the system you have is compatible before placing down your cash.

02. External Floppy Drive

■ With some Amiga games coming on multiple discs, an additional external floppy drive helps cut down the amount of swapping you have to do. When you've got two-disc games this is a life-saver, but when you've got games which come on several floppies, it prevents the onset of repetitive strain injury.

03. GVP A530 Turbo

■ Released in 1992, this module bolts onto the side of the Amiga 500 and grants it additional processing grunt and memory. Modern "Accelerator Cards" are also available, which benefit from more recent developments – and they're also cheaper – but if you're going for authenticity, seek something like this out.

04. Action Replay

■ It wasn't just home consoles which got a version of Datel's cheeky cheat cartridge – the Amiga had a slice of the action, too. This fiendish little device allows you to crack your games wide open, drastically reducing the challenge in the process.

05. A590 Hard Drive Controller

■ Back in the day, this unit would allow you to hook up a hard drive of around 80MB in size, but modern Kickstarter ROMs have pushed this figure higher. Getting one of these to work is quite a task, but it's another cool piece of collectable hardware.

06. 1084s Monitor

■ Playing games on your massive 50" LCD TV is one thing, but for the truly authentic experience you need to get yourself a decent monitor. Released by Commodore alongside the Amiga, these units were designed to bring out the best in the system. Games look colourful, vibrant and incredibly detailed.

07. Amiga A500 Trapdoor Expansion Memory

■ 512K is all the memory the Amiga 500 shipped with, but using the A501 you could up to this an impressive 1MB – offering better multitasking support and enhanced performance all-round.

AMIGA 500 The Collector's Guide

TOP GAMES TO PLAY

Eye of the Beholder II

■ Westwood's second stab at the D&D world is an improvement over its predecessor – and that's saying something, as the original took the *Dungeon Master* template and expanded it massively. The third game – not handled by Westwood – remains something of a disappointment.

Sensible World of Soccer

■ Considered by many to be the best football game ever, *Sensible World Of Soccer* was a revelation at the time of release, allowing you to experience almost every facet of the professional footy world – right down to managing your team and organising transfers. 1,500 teams and 27,000 players.

Speedball 2

■ The Bitmap Brothers really hit the ball out of the park with this futuristic and ultra-violent sport. Gorgeous to look at and absolutely addictive in two-player mode, *Speedball 2* is arguably one of the Amiga's defining releases.

Cannon Fodder

■ The use of the poppy image caused quite a stir when *Cannon Fodder* was released, but the cartoon-like violence is laughably tame when compared to modern titles like *Call Of Duty* and *Medal Of Honor*. Despite the controversy, this remains a fantastically playable game, with brilliant controls.

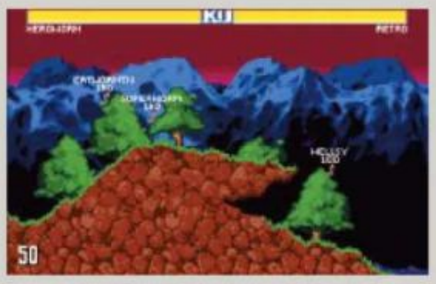
The Chaos Engine

■ Another Bitmap Brothers classic, *The Chaos Engine* is a steampunk shooter which showcases why its developer was considered the master of 16-bit pixel art back in the early Nineties. A sequel in 1996 was even better, but the original is more famous.

PLAY THESE NEXT

Alien Breed

■ Team17's most famous release (outside of *Worms*, naturally) is this atmospheric top-down blaster, which owes a massive debt to Ridley Scott's Hollywood horror *Alien*. Tense action, a stern challenge and awesome 2D visuals ensure this stands the test of time – as the recent release on the iPhone proves beyond all doubt.



Worms

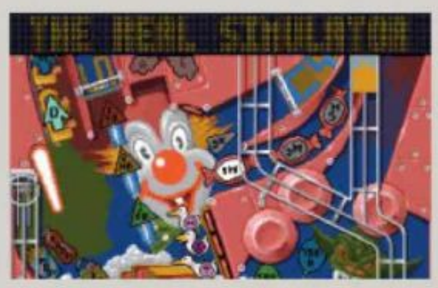
■ The fact that the *Worms* series is still going strong even to this day should tell you all you need to know about the quality of this game. Insanely addictive in both single and multiplayer, the turn-based combat is peppered with humour, lending the game a universal charm. Despite the sequels, the first game remains the most pure edition.

Super Cars 2

■ Top-down racing brilliance from Magnetic Fields and Gremlin Graphics, with a good measure of frantic combat thrown for good measure. The ability to upgrade your vehicle adds depth, and the two-player mode is capable of making (or breaking) friendships. Topped off with amazing visuals, this is another Amiga classic.

Hunter

■ Predating the likes of *Far Cry 3* by more than two decades, *Hunter* is an 3D open-world adventure which sees you navigating a collection of islands via a wide range of different vehicles – including cars, hovercraft and even surfboards. Tremendously influential, *Hunter* is remarkable for the degree of freedom it affords the player.



Pinball Fantasies

■ The sequel to the equally brilliant *Pinball Dreams*, *Pinball Fantasies* is still regarded by many fans as the best representation of pinball on any digital platform. The bold graphics remain impressive, and the ball physics and table designs are spot-on. The sequel – *Pinball Illusions* – is also worth checking out.

Xenon 2: Megablast

■ Drastically different from its prequel, *Xenon 2* cemented The Bitmap Brothers' reputation as developers of note – although it should be mentioned that they only designed the game, with the actual coding being done by The Assembly Line. A sampled soundtrack only served to make the game seem even cooler.

Gods

■ Another gem from The Bitmap Brothers showcasing some of the best visuals you'll see on any 16-bit platform. This puzzle-filled action platformer illustrates the Brothers' masterful skill with the Amiga hardware; it would be converted to other formats, but the Amiga version is the definitive article.

Hired Guns

■ This *Dungeon Master*-style RPG grants control of four different characters, with the twist being that they move independently and have their own windowed screen. One of DMA Design's most accomplished releases, and a nice deviation on the genre.

Lemmings

■ One of the most famous video game brands of the early Nineties, *Lemmings* was ported to practically every platform that existed at the time, but is best known for its outing on the Amiga and Atari ST. It illustrates perfectly how a mouse-driven interface can enrich a game like this.

Shadow Of The Beast 2

■ *The Shadow Of The Beast* series is famous for favouring style over substance, but there's still something undeniably intriguing about the trilogy. Roger Dean's fantastic cover artwork pulls you in, and the high-quality visuals maintain your interest – even when the rock-hard difficulty level is making your question your skills.

Stunt Car Racer

■ Geoff Crammond's seminal 3D racer is like being on a rollercoaster, with the added danger of falling of the edge. It says a lot about the standard of this game that nothing else has ever really come close to matching it, even after all these years. Boasting fantastic physics and beautifully designed tracks, it's an essential part of any collection.

Syndicate

■ Coming quite late in the life of the Amiga, Bullfrog's iconic real-time strategy title was recently rebooted as an FPS, with mixed results. The original game is a grim vision of the future where corporations rule the world, placing you in the shoes of one such firm with the aim of achieving world domination.

Flashback

■ The spiritual sequel to *Another World*, this 2D platformer features silky-smooth animation, taxing puzzles, epic action and some of the best cut-scenes on a non-CD release. It's being remade for modern consoles as we speak, but it will need to be pretty special to match the impact of the original release.

UFO: Enemy Unknown

■ Julian Gollop's best-selling turn-based strategy title builds on the work done in his previous games, such as *Rebelstar Raiders* and the excellent *Laser Squad*. Recently remade for PC, 360 and PS3, this isometric title is regarded by some as one of the greatest games of all time – and rightly so.

Lotus Turbo Challenge 2

■ Before *Gran Turismo* and *Forza*, this was the best option for petrolheads wanting to experience the thrill of racing thousands of pounds of performance sports car really, really, fast. Smart visuals combine with a superb sense of speed and four-player split screen to deliver a solid racer.

AMIGA 500 The Collector's Guide

TOP RAREST PAL GAMES

Moonstone

■ This medieval hack-and-slash action title gained notoriety upon release for being banned in Germany due to its blood and gore, yet it received fair-to-middling review scores. Even so, the game's reputation as a video game nasty has kept its value high – copies go for well over £100 on eBay.

Gem'X

■ This anime-themed puzzler is another Amiga title which isn't all that great when it comes to pure gameplay, but is extremely hard to track down in the wild. Although scantily-clad anime girls were a key factor in the game's appeal to a certain market, it's all a little tame.

Last Battle

■ Based on the Mega Drive version – which in turn is a westernised version of the Japanese game *Fist Of The North Star* – this curious conversion by Elite isn't particularly memorable, aside from the fact that it's rarer than rocking horse droppings.

Jim Power In Mutant Planet

■ With its distinctive visuals, curious mixture of gameplay styles and pumping soundtrack courtesy of Chris "*Turrican*" Hülsbeck, *Jim Power* manages to overcome the obvious shortcomings of its terrible cover art and become a worthwhile action title.

Traps 'n' Treasures

■ A colourful clone of Sega's *Wonderboy In Monsterland* series (developer Roman Werner lists Capcom's *Son Son II* as one of his all-time favourite games), *Traps 'n' Treasures* boasts some lovely hand-drawn 2D visuals and compelling action.

GET THESE NEXT

OutRun (Sega version)

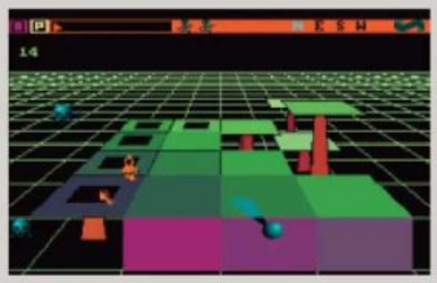
■ The Sega-published US version of Yu Suzuki's popular arcade racer is much harder to track down than the UK US Gold-published edition, but it's the same game on the actual disk. We actually prefer the UK box art if we're honest, but serious collectors will no doubt want to add this to their "must buy" list.

Amiga Karate

■ Its triangular box might not sit well on your shelf, but it certainly makes this martial arts title stand out from the other games in your collection. Looking a lot like *Archer Maclean's International Karate+*, this isn't quite as accomplished, but it remains an extremely enjoyable fighter in two-player mode.

Agony

■ There are a wealth of imaginative shooters on the Amiga, but it's *Agony*, by Psygnosis that is currently proving to be one of the hardest, and most expensive ones to currently source. The popular shoot-'em-up is not only incredible to look at, but also sounds superb, ensuring that copies online rarely sell for under £100 when they do turn up.



Mind Walker

■ One of the earliest Amiga games, *Mind Walker* was released in 1986 – yet it remarkably remains compatible with almost all Amiga hardware variants. The unique visuals and out-there storyline make this an interesting release, and one well worth picking up – especially if you're serious about your Amiga history.

Vaxine

■ Like *Amiga Karate*, this is mainly popular with collectors due to its extremely interesting packaging – it was distributed in a round metal tin rather than the standard cardboard box. A trippy first-person shooter where the player attempts to repel a deadly virus, it's actually very playable, too, so be sure to seek it out.

THE JEWEL IN THE CROWN

If you're looking for a rare PAL Amiga game that feels genuinely unique, this is the item you should seek out for your collection

What makes it so special?

■ The story behind *The Great Giana Sisters* is the stuff of legend, but the involvement of Manfred Trenz and Chris Hülsbeck – who both worked on *Turrican* – also helps add a certain degree of desirability to the game.

Giana Sisters
We want you to have a lot more fun, therefore we have implemented the following changes and enlargements in the ATARI ST and AMIGA versions of GIANA SISTERS.
1. You can collect and keep several MAGIC-bombs and CLOCKS (instructions) in order to use them when they are needed.
2. Pushing the joystick down diagonaly to the
The great
GIANA SISTERS

Why should you play it?

■ Even if you ignore its back story, the game is fantastic fun. It's not quite up to the majesty of Nintendo's original platformer, but its quality is immediately obvious. Many platformers, particularly on the Amiga, failed to capture the magic of their console counterparts, but this wasn't the case with *The Great Giana Sisters*.

What makes it hard to find?

■ What makes it so hard to find? The game is heavily influenced by Nintendo's *Super Mario Bros*, and was pulled from store shelves following legal pressure from Nintendo. As a result, not many copies made it into circulation. The are two variants of the Amiga version, the one shown here and a traditional big box.

Why is it so expensive?

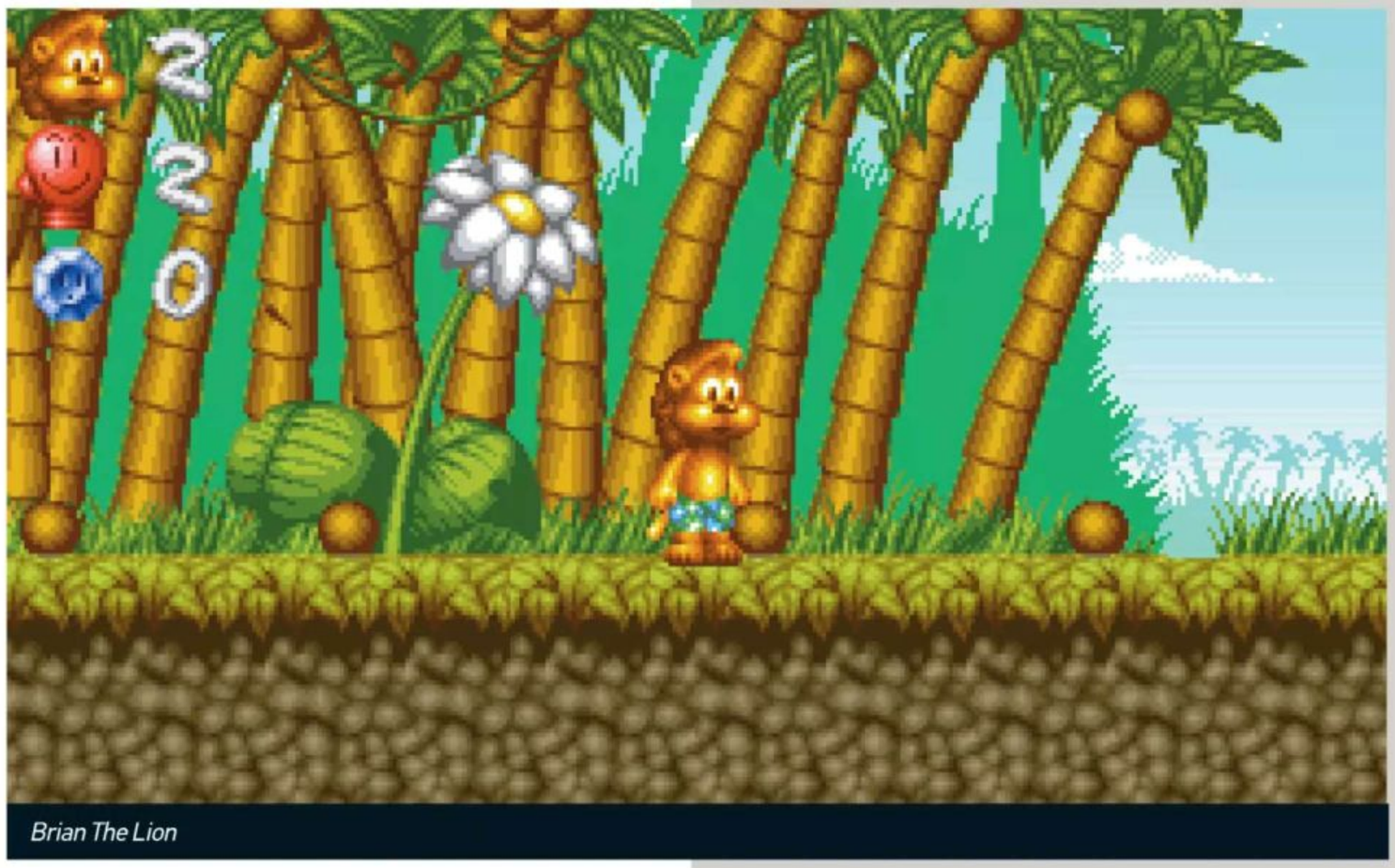
■ The game's fame and status as a *Mario* clone helps keep the price high. Because there are so few copies around, demand is always strong and when the game is up for sale on eBay, it always fetches an insane amount of money.

AMIGA 500 The Collector's Guide

THE PAL AMIGA GAMES YOU NEED TO OWN

Bombuzal

- A Mind Forever Voyaging
- A Prehistoric Tale
- Adventure Quest
- After Burner
- Alien Storm
- After The War
- Agony
- Akira
- Alien Breed
- Alien Drug Lords: The Chyropian Connection
- Apidya
- Arctic Fox
- Arkanoid
- Army Moves
- Artificial Dreams
- Aztec Warrior
- Batman: The Caped Crusader
- B.C. Kid
- Baron Baldric: A Grave Adventure
- Battle Chess
- Battle Squadron
- Battle Valley
- Beyond Zork
- Bionic Commando
- Bismarck
- Black Viper
- Blasteris
- Blazing Thunder
- Bloodnet
- BMX Simulator
- Body Blows
- Bombuzal
- Boomeraid
- Borrowed Time
- Brainbusters
- Brainstorm
- Brataccas
- Brian The Lion
- Brutal: Paws Of Fury
- Buck Rogers: Countdown To Doomsday
- Buggy Boy
- Cannon Fodder
- Captain Blood
- Carrier Command
- Castle Warrior
- Checkmate
- Chinese Chess
- Chip's Challenge
- Classic Invaders
- Cobra
- Coloris
- Commando
- Conan The Cimmerian
- Cool Croc Twins
- Corporate Raiders
- Cosmo Range
- Crystal Quest
- Cubit
- Cyber Cop
- D/Generation
- Darkseed
- Deep Space
- Defender Of The Crown
- Demon Blue
- Denaris
- Diggers
- Digital Dungeon
- DNA Warrior
- Dogs of War
- Dragon Lord
- Dream Zone
- Elf
- Elite
- Elvira: The Arcade Game
- Entity
- Escape From Colditz
- ESWAT: Cyber Police
- European Championship 1992
- Explora: Time Run
- Exxon
- Eye of the Beholder
- F-16 Combat Pilot
- Fields Of Glory
- Final Countdown
- Fire and Brimstone
- First Class With The Shoe People
- Flood
- Formula 1 3D
- Future Sport
- Garfield: Winter's Tale
- Gee Bee Air Rally
- Gem'X
- Genius
- Ghost Chaser
- Ghosts 'n Goblins
- Gladiators
- Goal! Championship Cup Edition
- Golden Axe
- Grand Slam: World Class Tennis
- Gravity Force
- Great Giana Sisters
- Gulp!
- Hacker
- Hard 'n' Heavy
- Hardball!
- Harrier Combat Simulator
- Hellfire Attack
- Heroquest
- Hot Rod
- Hotel Manager
- Hybris
- Ian Botham's Cricket
- Impossible Mission
- Iron Tracker
- James Pond: Underwater Agent
- Jewels of Darkness
- Jim Power
- Joe & Mac: Caveman Ninja
- Journey To The Centre Of The Earth
- Jungle Boy
- Katakis
- Kick Off 2
- Kwik Snax
- Lancelot
- Last Battle
- LED Storm



Brian The Lion

EXTREMELY RARE Games that have less than a few dozen known copies available.

VERY RARE Very hard to come by. Expect to see only a couple of copies per year.

RARE You should be able to source these in a reasonable amount of time.

UNCOMMON You won't find them straight away, but you will after a search.

COMMON Always just a click away for the average collector.

VERY COMMON So common you'll find them in most bundles of games you buy.

Loom

- Lemmings ☐
- Lethal Xcess: Wings Of Death 2 ☐
- Libyans In Space ☐
- Limes & Napoleon ☐
- Loom ☐
- Lords of War ☐
- Mace ☐
- Mega Twins ☐
- Mewilo ☐
- Microprose Soccer ☐
- Midwinter ☐
- Millennium 2.2 ☐
- Mitre Soccer Superstars ☐
- Moonstone: A Hard Days Knight ☐
- Mr. DO! Run Run ☐
- Mr. HELI ☐
- Murders In Space ☐
- Narco Police ☐
- Nathan Never: The Arcade Game ☐
- Nigel Mansell's Grand Prix ☐
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- Ninja Mission ☐
- No Exit ☐
- Nobunaga's Ambition ☐
- Operation Wolf ☐
- OutRun (Sega version) ☐
- Pacboy ☐
- Panzer Kick Boxing ☐
- Paperboy ☐
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- Pipe Dream ☐
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- Rules Of Engagement ☐
- S.T.U.N. Runner ☐
- Sanctuary ☐
- Satan ☐
- Savage ☐
- Scramble Spirits ☐
- Seven Cities Of Gold ☐
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- Sim City ☐
- Ski or Die ☐
- Sky Fighter ☐
- Skyfox ☐
- Slackskin & Flint ☐
- Sly Spy: Secret Agent ☐
- Snoopy and Peanuts ☐
- Soccer Mania ☐
- Soccer Superstars ☐
- Space Harrier (US Gold) ☐
- Space Crusade ☐
- Space Ranger ☐
- Space School Simulator: The Academy ☐
- Speed Buggy ☐
- Spinworld ☐
- Spot ☐
- Spuk ☐
- Spy vs. Spy ☐
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- Star Wars: Return Of The Jedi ☐
- Street Gang ☐
- Strider ☐
- Strike Force Harrier ☐
- Strip Fighter ☐
- Strip Pot ☐
- Suicide Mission ☐
- Summer Challenge ☐
- Super C ☐
- Super Loopz ☐
- Super Wonder Boy ☐
- Superfrog ☐
- Table Tennis Simulation ☐
- Team Yankee ☐
- Teenage Mutant Hero Turtles: The Coin-Op ☐
- Terry's Big Adventure ☐
- The Chaos Engine 2 ☐
- The Chessmaster 2000 ☐
- The Deep ☐
- The Flintstones ☐
- The King Of Chicago ☐
- The Last Inca ☐
- The Lurking Horror ☐
- The Magic Garden ☐
- The Man From The Council ☐
- The Simpsons: Bart Vs The Space Mutants ☐
- Theme Park ☐
- Thexder ☐
- Time And Magik: The Trilogy ☐
- Tom & Jerry 2 ☐
- Top Of The League ☐
- Traps 'n' Treasures ☐
- Tron 5000 ☐
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- Twin World ☐
- Twintris ☐
- UFO: Enemy Unknown ☐
- Ultima VI: The False Prophet ☐
- Victory Road: The Pathway to Fear ☐
- Video Vegas ☐
- Viz: The Computer Game ☐
- Vortex ☐
- War In Middle Earth ☐
- War Machine ☐
- Wargame Construction Set ☐
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- Wing Commander ☐
- Worms ☐
- X-COM: UFO Defense ☐
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Xenon II: Megablast

* Special thanks to Carlo Pirri and Michael Mayerhofer for their photography assistance and the always helpful Hall of Light

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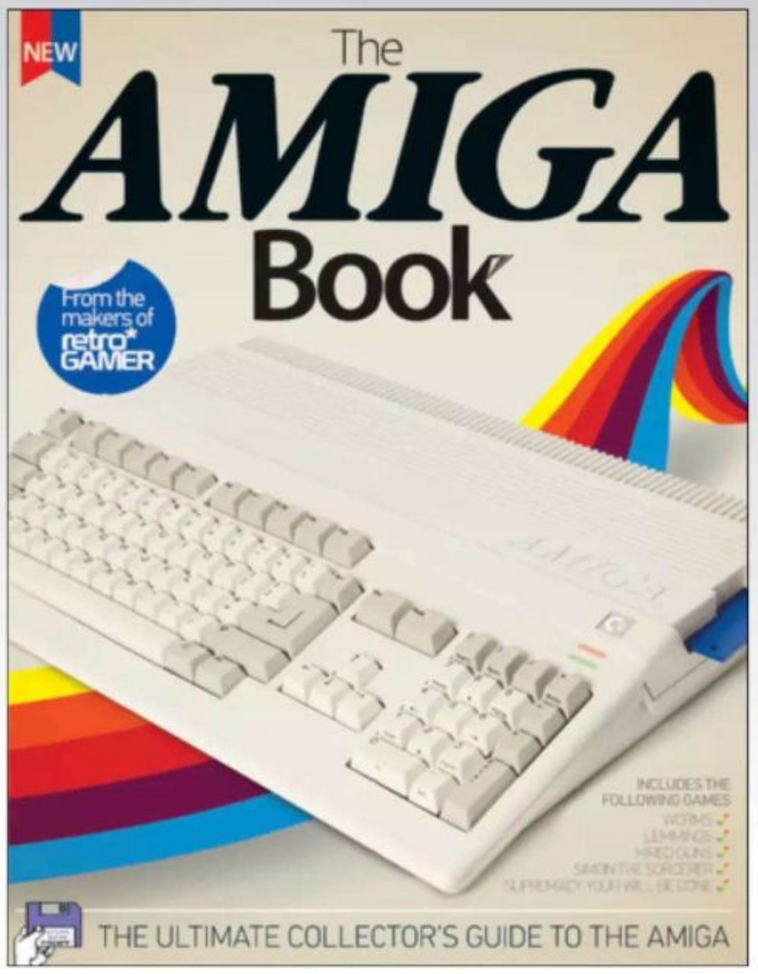

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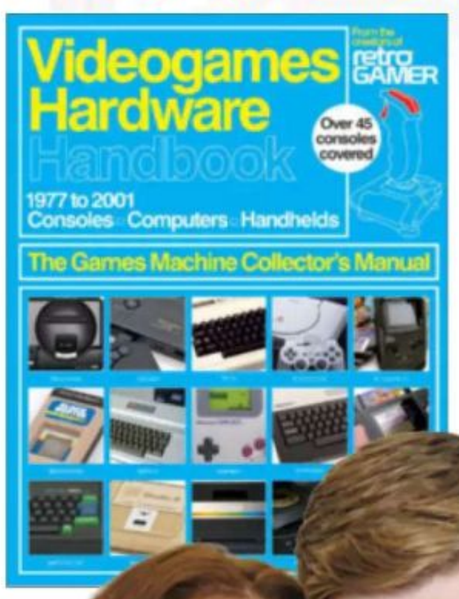

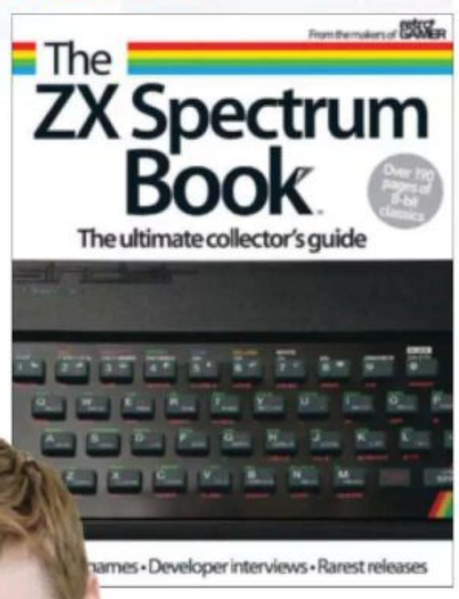
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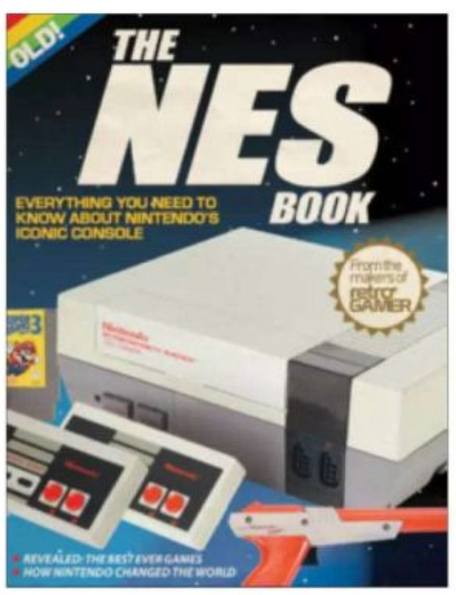

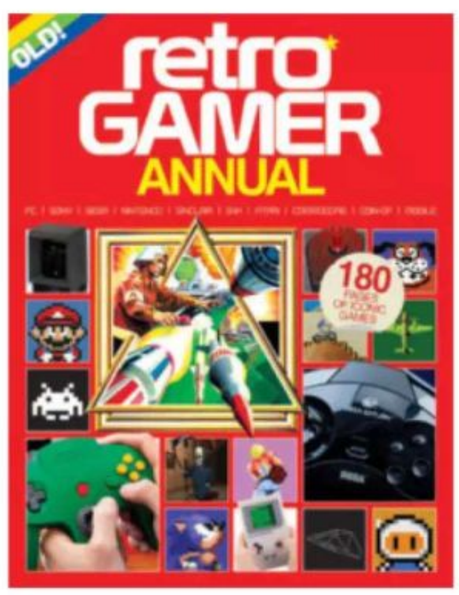

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